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DEPARTMENT OF TRADE AND COMMERCE, CANADA

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CANADA YEAR BOOK
1938

THE OFFICIAL STATISTICAL ANNUAL OF THE RESOURCES,
HISTORY, INSTITUTIONS, AND SOCIAL AND ECONOMIC
CONDITIONS OF THE DOMINION

Published by Authority of
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MINISTER OF TRADE AND COMMERCE



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THE
CANADA YEAR BOOK

1938

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PREFACE.

The Canada Year Book had its beginning in the first year of the Dominion when the semi-official "Year Book and Almanac of British North America"—being (to quote its sub-title) "an Annual Register of political, vital and trade statistics, customs tariffs, excise and stamp duties, and all public events of interest in Upper and Lower Canada, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland, and West Indies"—was founded. Subsequently the title was changed to "The Year Book and Almanac of Canada,—an annual statistical abstract of the Dominion and a register of legislation and of public men in British North America". It was published annually from 1867 to 1879.

In 1886, after the passing of a general Statistics Act, the "Statistical Abstract and Record of Canada" was instituted as an official book of reference respecting the institutions, population, finance, trade, and general conditions of the Dominion. The work was prepared in the General Statistical Office of the Department of Agriculture and was continued annually until 1904 under the direction of Dr. George Johnson, F.S.S. To use Dr. Johnson's words, the main feature of the Statistical Abstract was "the collection into one book of the information of various kinds scattered through the blue books issued by the several Departments". He goes on to say, "This book has become the *vade mecum* of public men . . . in Canada as well as in all other civilized countries". In 1905, the General Statistical Office was amalgamated with the Census Office. The Year Book was remodelled by Dr. Archibald Blue, Chief Officer, and continued as "The Canada Year Book, Second Series".

In the re-organization of statistics which followed the report of the Royal Commission on Statistics of 1912, and the establishment of the Dominion Bureau of Statistics in 1918, the improvement of the Year Book was made a primary object and this progress has been continued down to the present time.

With the growth of the administrative functions of government and the consequent increase in the content and variety of the statistical data made available, it is becoming difficult to keep the size of the Year Book within convenient limits and the policy has been adopted of replacing material which is unchanged from year to year by adequate references to earlier editions, but every care is taken to keep the framework intact and well balanced. Some of the space thus saved is given to necessary revisions, additions, important new material, and special features, among the chief of which in the current edition are the following: In Chapter I, which treats of Physiography, a revised article on the Geology of Canada appears at pp. 16-27; Part III—Seismology—last published in the 1931 Year Book is brought up to date this year; and a special article, "The Flora of Canada", prepared by John Adams, M.A. (Cantab.), Division of Botany, Experimental Farm, Ottawa, appears at pp. 30-59 as Part IV. In Part VII, which deals with Climate and Meteorology, a new section and tables on Times of Sunrise and Sunset in Canada are given.

At pp. 78-90, an additional Part on Historic Sites and Monuments in Canada is added to Chapter II. A section on the Government of Canada's Arctic Territory has been added to Chapter III at pp. 92-93, and at pp. 110 to 119 the provincial legislatures from 1924 to the present are tabulated, tying-in with the series from Confederation to 1923 published in the 1924 Year Book.

A special feature of Chapter VIII—Agriculture—this year is the article appearing at pp. 223-230 dealing with the Prairie Farm Rehabilitation Program inaugurated

by the Dominion Government to alleviate the conditions brought about by the incidence of the recent agricultural crisis in the West, and to provide for permanent improvements in areas suffering from drought and soil-drifting.

All the space that could be spared in Chapter XIX—Labour and Wages—has been given to a summary review of Labour Legislation in Canada, which appears at pp. 787-796, and to an extended treatment of Mothers' Allowances by individual provinces.

In addition to the special features mentioned, some progress has been made in filling in the new framework of Chapter XVIII—Transportation and Communications—as it was recast last year, but unfortunately certain of the statistical series are not yet complete. The section of Chapter XXI—Public Finance—which deals with Capital Investments in Canada and Canadian Investments Abroad, has been completely revised and a new series of historical statistics on a comparable basis, which entirely replaces all earlier figures, is now presented for the years 1926 to 1935 at pp. 896-899. In Chapter XXIII—Currency and Banking—the tables concerning Loan and Trust Companies have been recast, statistics regarding Small Loans Companies separated therefrom, and a separate section on Small Loans Companies added: the business of these companies has now reached considerable proportions and, in view of the special legislation governing their incorporation and operation, this separation is desirable. The review of life insurance given in Chapter XXIII has been rounded out by the inclusion of text and tables covering the business of Canadian companies abroad and Chapter XXV—Education—has been recast, both in regard to textual treatment and tabular presentations.

The list of special articles appearing in past editions from 1922 to 1937 will be found at p. vi, immediately preceding the Map of Canada.

In addition to the above-noted features, all parts of the volume have been carefully revised and brought up to date by the most competent authorities; the latest information appearing to the date of going to press is included.

In the absence of the Editor, S. A. Cudmore, B.A. (Tor.), M.A. (Oxon.), F.S.S., F.R.Econ. Soc., (seconded to the Government of Palestine), the present volume has been edited by A. E. Millward, B.A., B.Com., assisted by W. H. Lanceley, and R. F. Clarke, M.C., D.L.S., of the editorial staff of the General Statistics Branch of the Bureau. Charts, graphs and layouts except as otherwise credited have been made by, or under the supervision of, J. W. Delisle, Senior Draughtsman of the Dominion Bureau of Statistics.

Grateful acknowledgments are hereby tendered to the numerous officials of the Dominion and Provincial Governments, and other individuals, who have assisted in the collection of information. Credit is apportioned to the various persons and services concerned by means of footnotes to those chapters and sections that have been contributed, or in the compilation of which co-operation has been received.

While every care has been taken in preparation, there are doubtless imperfections and, with a view to the improvements of future editions, the Dominion Statistician will be glad to hear of any errors that may have escaped notice, and to receive suggestions with regard to omissions or to method of treatment.

R. H. COATS,
Dominion Statistician.

DOMINION BUREAU OF STATISTICS,
OTTAWA, June 1, 1938.

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SPECIAL ARTICLES IN THE CANADA YEAR BOOK, 1922-37.

(Not repeated in this edition.)

	VOLUME.	PAGES.
History of Canada. Revised and abridged from that prepared under the direction of Arthur G. Doughty, C.M.G., LL.D., Deputy Minister, Public Archives of Canada, for the 1913 Year Book. . . .	1922-23	60-80
The Constitution and General Government of Canada. By the Editor	1922-23	89-100
Provincial and Local Government in Canada. By various authors. . .	1922-23	101-115
Development of Agriculture in Canada. By Dr. J. H. Grisdale, Deputy Minister, Department of Agriculture, Ottawa.	1924	186-191
A Sketch of the History of the Canadian Lumber Trade. By A. R. M. Lower, M.A., Public Archives, Ottawa.	1925	318-323
The Co-operative Movement in Canada. By Miss Margaret Mackintosh, Department of Labour, Ottawa.	1925	704-720
Legislation Respecting Combinations in Restraint of Trade. By F. A. McGregor, Registrar, Combines Investigation Act, Department of Labour, Ottawa.	1927-28	765-770
Wages Statistics of the Census of 1921. By Miss M. E. K. Roughsedge, Dominion Bureau of Statistics.	1927-28	774-783
The Climate of Canada. By Sir Frederic Stupart, Director of the Meteorological Service, Toronto.	1929	42-51
Occupations of the People. By Miss M. E. K. Roughsedge, Dominion Bureau of Statistics.	1929	134-147
The Temperature and Precipitation of Northern Canada. By A. J. Connor, Meteorological Service, Toronto.	1930	41-56
Seismology in Canada. By E. A. Hodgson, M.A., Dominion Observatory, Ottawa.	1931	37-38
The Development of the Fine Arts in Canada. By Newton MacTavish, M.A., D. Litt., Ottawa.	1931	995-1009
Droughts in Western Canada. By A. J. Connor, Meteorological Service, Toronto.	1933	47-59
Standard Time and Time Zones in Canada. By C. C. Smith, Dominion Observatory, Ottawa.	1934-35	50-53
Canada on Vimy Ridge. By Col. A. Fortescue Duguid, D.S.O., B.Sc., R.C.A., Department of National Defence, Ottawa.	1936	50-60
Economic Geology. By F. J. Alcock, Ph.D., Department of Mines and Resources, Ottawa.	1937	16-28
Faunas of Canada. By R. M. Anderson, Ph.D., National Museum of Canada.	1937	29-52
Occupations of the Canadian People. By A. H. LeNeveu, M.A., Dominion Bureau of Statistics.	1937	128-146



DOMINION OF CANADA (EXCLUSIVE OF NORTHERN REGIONS)

Scale of miles
100 50 0 100 200 300 400

Provincial Capitals • Dominion Capital ★

DISTANCES BETWEEN PRINCIPAL POINTS IN CANADA.*

NOTE.—Generally, the distances given are the shortest by railway.

A knowledge of distances in miles between principal constitutes very useful information in these days of wide travel, but when an attempt is made to compile such data difficulties are at once encountered. Railway distances are the logical choice, even though road distances are of increasing interest to a vast body of travellers by automobile and are a useful alternative. Railway distances represent usually the shortest practicable land distances between two points and even to-day the bulk of freight and passenger traffic is by rail. Again, distances by air (sometimes called "bee-line" distances) are only useful in practice to those who travel by air. This is a growing phase of transportation, of course, but has not yet assumed such proportions that its tabulation should displace the more usual one. Again, it is not a difficult matter to estimate air-line distances from a map made to convenient scale, whereas the ordinary reader is not able to obtain railway distances easily.

Even though it be decided to adopt railway distances as most useful, it is necessary to decide whether the most travelled route between two places or the shortest railway route should govern. In the tables given below, the distances between points are the shortest distances by railway and not necessarily the most travelled routes or the routes by which main trains travel. They are compiled principally from the railway time tables. The main table includes the capital of each province and some of the main shipping points chosen principally, but not altogether, by population; the subsidiary tables include distances of local importance. Included in the distances from Charlottetown is the distance from Borden to Cape Tormentine, over which the trains are transported by ferry; similarly, the train ferry distance between Mulgrave and Point Tupper is included in the distance from Halifax to Sydney. In the much smaller distances from Victoria included the distance travelled by boat from Victoria to Vancouver. However, wherever possible, railway distances only were used. In certain distances from Three Rivers and from Quebec it is possible, by the use of ferries, to travel by shorter routes than those given in the tables, the rail route only being taken in these cases.

Where boat routes are given, the best approximation of the distance travelled is used.

The air-line distances used are not necessarily the straight line distances between points, but are the distances over the routes usually travelled by aeroplanes in good weather.

Place.	Halifax.	Moncton.	Charlottetown.	Saint John.	Fredricton.	Quebec.	Montreal.	Sherbrooke.	Three Rivers.	Ottawa.	Kingston.	Toronto.	Hamilton.	London.	Windsor.	Fort William.	Winnipeg.	Brandon.	Churchill.	Regina.	Saskatoon.	Calgary.	Edmonton.	Vancouver.	Victoria.	Prince Rupert.
Halifax.....	0	189	230	278	292	663	747	840	740	858	920	1051	1129	1196	1206	1716	2012	2148	2691	2287	2483	2834	2813	2475	3580	3769
Moncton.....	189	0	126	89	104	473	558	657	551	699	731	892	931	1007	1117	1527	1823	1957	2802	2178	2294	2645	2624	2326	3371	3580
Charlottetown.....	210	126	0	215	230	560	643	747	677	705	857	1018	1057	1133	1243	1653	1950	2084	2929	2305	2421	2772	2761	2413	3498	3707
Saint John.....	278	89	215	0	67	135	176	372	553	687	840	910	949	1025	1148	1776	1910	2755	2131	2247	2598	2577	2329	3324	3533	
Fredricton.....	292	104	230	67	0	403	454	353	481	615	627	788	837	903	1013	1423	1763	1887	2732	2108	2224	2575	2554	2316	3310	3510
Quebec.....	663	473	600	426	403	0	169	127	78	200	342	508	542	618	728	1078	1350	1484	2329	1705	1821	2172	2151	2813	2968	3147
Montreal.....	747	558	643	478	454	169	0	101	93	111	173	334	372	448	559	969	1353	1486	2331	1722	1832	2174	2150	2815	2967	3169
Sherbrooke.....	840	657	553	375	353	127	101	0	196	212	274	435	474	550	660	1070	1454	1587	2432	1808	1924	2275	2254	2916	3001	3210
Three Rivers.....	740	551	677	503	451	78	95	196	0	206	268	429	468	544	654	1064	1448	1581	2426	1802	1918	2269	2248	2910	2995	3205
Ottawa.....	858	699	705	687	650	111	212	905	0	112	247	396	429	505	615	1025	1376	1509	2354	1712	1826	2177	2156	2820	2974	3183
Kingston.....	920	731	857	649	627	342	173	274	295	112	0	161	200	276	386	808	1292	1426	2270	1647	1763	2113	2093	2724	2839	3049
Toronto.....	1051	892	1018	910	873	453	274	429	217	0	39	115	225	311	429	811	1207	1340	2185	1552	1677	2028	2008	2670	2755	2964
Hamilton.....	1129	931	1057	849	827	543	373	474	468	283	200	390	500	610	728	1138	1379	1512	2357	1716	1831	2182	2161	2825	2979	3188
London.....	1196	1007	1133	925	903	618	449	550	544	262	276	416	505	615	728	1138	1380	1513	2358	1717	1832	2183	2162	2826	2980	3189
Windsor.....	1206	1117	1243	1035	1013	728	559	660	654	282	200	390	500	610	728	1138	1380	1513	2358	1717	1832	2183	2162	2826	2980	3189
Fort William.....	1716	1527	1653	1445	1423	1070	969	1070	1064	858	805	926	1096	1206	1316	1426	1536	1646	2491	1787	1902	2253	2233	2885	2980	3189
Winnipeg.....	2012	1823	1950	1776	1753	1350	1253	1454	1448	1243	1292	1327	1246	1322	1432	419	0	123	978	355	470	821	801	1463	1548	1757
Brandon.....	2148	1957	2084	1910	1887	1484	1486	1687	1581	1375	1426	1340	1379	1455	1565	552	183	0	937	221	384	688	715	1330	1415	1671
Churchill.....	2691	2699	2929	2755	2732	2329	2331	2129	2426	2220	2270	2105	2221	2300	2410	1327	928	937	0	845	313	1217	1144	1359	1914	2100
Regina.....	2287	2178	2305	2131	2108	1705	1707	1593	1602	1596	1647	1522	1501	1677	1787	774	355	221	845	0	163	467	463	1108	1193	1449
Saskatoon.....	2483	2294	2421	2247	2224	1802	1804	1687	1696	1719	1770	1677	1716	1792	1902	868	470	394	812	163	0	404	330	1048	1131	1287
Calgary.....	2834	2645	2772	2598	2575	2172	2174	2275	2208	2063	2113	2028	2067	2143	2253	1240	821	683	1217	467	404	0	391	642	727	1150
Edmonton.....	2813	2624	2751	2577	2554	2151	2153	2254	2198	2042	2093	2008	2047	2123	2233	1220	801	715	1144	493	330	194	0	761	846	955
Vancouver.....	3580	3371	3510	3324	3301	2995	2990	2901	2995	2799	2839	2765	2791	2870	2980	1647	1548	1415	1914	1193	1131	727	846	85	0	1245
Victoria.....	3769	3580	3707	3533	3510	3167	3169	3210	3203	2998	3049	2964	3003	3079	3189	2176	1767	1671	2100	1449	1287	1150	956	1158	1243	0
Prince Rupert.....																										

From Halifax—	217	From Toronto—	61	From Winnipeg—	64	From North Stafford—	259	From Waterways—	242	From Vancouver—	507
to Yarmouth.....	289	to Brandon.....	74	to Portage la Prairie.....	54	to Yorkton.....	123	To Fort Smith.....	212	to Trail.....	507
to Sydney.....	304	to St. Catharines.....	68	to The Pas.....	408					to Kamloops.....	561
to Glace Bay.....	304	to Kitchener.....	63	to Flinton.....	560					to Prince Rupert.....	241
to New Glasgow.....	107	to Peterborough.....	77	To (water road from Hford to God's Bay, 132 miles).....	784					to (by boat) Whitehorse, Y.T.....	1,582
From Saint John—	220	to North Bay.....	223	to Medicine Hat.....	176					to (by boat) Cameron Bay.....	614
to Edmunds.....	278	to Sudbury.....	260	to Lethbridge.....	137					to (by boat) Resolution.....	612
to Campbellton.....	378	to Saint Ste. Marie.....	439	to Norwaga, Hone (by boat from Selkirk).....	263					to Dawson, Y.T.....	1,073
to St. Stephen.....	83	to Louis Lookout.....	855	to Red Deer.....	137					to (by boat) Norman.....	1,606
From Montreal—	89	to Cochrane.....	479	From Edmonton—	236					to (by boat) Aklavik.....	673
to Shawinigan Falls.....	89	to Kacora.....	1,105	to Jasper.....	236					to (1,606 by boat).....	1,241
to St. Hyacinthe.....	35	to Cobalt.....	830	to Moose Jaw.....	22						
to Niagara.....	35	to St. Catharines.....	63	to Swift Current.....	49						
to Noyand.....	642	to Moosemen.....	686	to Prince Albert.....	62						
					21						
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From Halifax—		to Toronto—		From Winnipeg—		to North Battleford.....	223	From Waterways—		to Vancouver—		
to Yarmouth.....	217	to Brandon.....	64	to Portage la Prairie.....	64	Yorkton.....	123	to Fort Smith.....	242	to Trail.....	507	
Sydney.....	289	St. Catharines.....	71	The Pas.....	408			Rae.....	(air-line)	Kamloops.....	231	
Glouce Bay.....	134	Kitchener.....	63	Piñon.....	460	From Calgary—		Prince Rupert.....	546	Prince George.....	591	
New Glasgow.....	107	Cabano.....	38	Alford (water road)	460	to Medicine Hat.....	178	Cameron Bay.....	(air-line)	Whitehorse, Y.T. (by boat)	1,082	
From Saint John—		Peterborough.....	77	Ilford to Gods Lake (132 miles).....	764	to Banff.....	127	Resolution.....	(by boat)	Dawson, Y.T. (part by boat)	1,473	
to Edmonton.....	236	Sudbury.....	240	to Moose Jaw.....	42	to Red Deer.....	95	Norman.....	(by boat)	Granite Prairie.....	(part by boat)	73
Campbellton.....	278	Sault Ste. Marie.....	439	Norway House (by boat from Selkirk).....	210	From Edmonton—		to Jasper.....				
St. Stephen.....	83	St. John's.....	479			to Peace River.....	317					
From Montreal—		Moncton.....	1,103	From Regina—		Waterways.....	305	Aklavik.....	(by boat)	From Victoria—		
to Shawiniga Falls.....	89	Cobalt.....	280	to Swift Current.....	122							
St. Hyacinthe.....	85	Timmins.....	485	Prince Albert.....	210							
Noranda.....	642	Moose.....	666									

* Prepared under the direction of F. H. Peters, Surveyor General and Chief, Hydrographic Survey, Department of Mines and Resources, Ottawa.

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THE
STATISTICAL SUMMARY
OF THE
PROGRESS OF CANADA
1871-1937.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA.

Area of the Dominion of Canada in square miles: Land, 3,466,556; Fresh Water, 228,307; Total, 3,694,863.

NOTE.—Dashes in this table indicate that comparable data or estimates are not available for the years so indicated.

	Item.	1871.	1881.	1891.	1901.	1906.
Population—^{1, 2}						
1	Prince Edward Island..... No.	94,021	108,891	109,078	103,259	96,000
2	Nova Scotia..... " "	387,800	440,572	450,396	459,574	465,000
3	New Brunswick..... " "	285,594	321,233	321,263	331,120	334,000
4	Quebec..... " "	1,191,516	1,359,027	1,488,535	1,648,898	1,784,000
5	Ontario..... " "	1,620,851	1,926,922	2,114,321	2,182,947	2,299,000
6	Manitoba..... " "	25,228	62,260	152,506	255,211	366,000
7	Saskatchewan..... " "	—	—	—	91,279	258,000
8	Alberta..... " "	—	—	—	73,022	185,000
9	British Columbia..... " "	36,247	49,459	98,173	178,657	279,000
10	Yukon..... " "	—	—	—	27,219	18,000
11	Northwest Territories..... " "	48,000	56,446	98,967	20,129	13,000
	Canada..... " "	3,689,257	4,324,810	4,833,239	5,371,315	6,097,000
Vital Statistics—⁶						
12	Births (live)..... No.	—	—	—	—	—
	Rates per 1,000.....	—	—	—	—	—
13	Deaths, all causes..... No.	—	—	—	—	—
	Rates per 1,000.....	—	—	—	—	—
14	Diseases of the heart?..... No.	—	—	—	—	—
15	Cancer..... " "	—	—	—	—	—
16	Diseases of the arteries?..... " "	—	—	—	—	—
17	Tuberculosis (all forms)?..... " "	—	—	—	—	—
18	Pneumonia..... " "	—	—	—	—	—
19	Nephritis..... " "	—	—	—	—	—
20	Marriages..... " "	—	—	—	—	—
	Rates per 1,000.....	—	—	—	—	—
21	Divorces..... No.	4	7	10	19	37
Immigration (calendar years)—						
22	From United Kingdom..... No.	—	17,033	22,042	11,810 ⁸	86,796 ⁸
23	From United States..... " "	—	21,822	52,516	17,987 ⁸	52,796 ⁸
24	From Other Countries..... " "	—	9,136	7,607	19,352 ⁸	44,472 ⁸
	Totals..... " "	27,773	47,991	82,165	49,149 ⁸	184,064 ⁸
Agriculture—						
25	Area of occupied farms..... acre	36,046,401	45,358,141	58,997,995	63,422,338	—
26	Improved lands..... " "	17,335,818	21,899,181	27,729,852	30,166,033	—
27	Gross value of agricultural production..... \$	—	—	—	—	—
Field Crops—¹⁰						
28	Wheat..... acre	1,646,781	2,366,554	2,701,213	4,224,542	—
	bu.	16,723,873	32,350,269	42,223,372	55,572,368	—
	\$	16,993,265	38,820,323	31,667,529	36,122,039	—
29	Oats..... acre	—	—	3,961,356	5,367,655	—
	bu.	42,489,453	70,493,131	83,428,202	151,497,407	—
	\$	15,966,310	23,967,665	31,702,717	51,509,118	—
30	Barley..... acre	—	—	868,464	871,800	—
	bu.	11,496,038	16,844,868	17,222,795	22,224,366	—
	\$	8,170,735	11,791,408	8,611,397	8,889,746	—
31	Corn..... acre	—	—	195,101	360,758	—
	bu.	3,802,830	9,025,142	10,711,380	25,875,919	—
	\$	2,283,145	5,415,085	5,034,348	11,902,923	—
32	Potatoes..... acre	403,102	464,289	450,190	448,743	—
	bu.	47,330,187	55,368,790	53,490,857	55,362,635	—
	\$	15,211,774	13,288,510	21,396,342	13,840,658	—
33	Hay and clover..... acre	3,650,419	4,458,349	5,931,548	6,543,423	—
	ton	3,818,641	5,055,810	7,693,733	6,943,715	—
	\$	38,869,900	40,446,480	69,243,597	85,625,315	—
	Total Areas, Field Crops.... acre	—	—	15,662,811	19,763,740	—
	Total Values, Field Crops ¹² .. \$	111,116,606	155,277,427	194,766,934	237,682,285	—

¹ Estimates of population since the 1931 Census are subject to adjustment as later data are made available.

² Figures for 1937 are subject to revision.

³ Estimated populations are given for inter-censal and post-censal years.

⁴ Revised in accordance with the Labrador Award of the Privy Council, Mar. 1, 1927.

⁵ Includes Canadian Navy.

⁶ Exclusive of the Territories.

⁷ For these causes of death the comparability between the figures for the year 1926 and those for the years

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

Area of the Dominion of Canada in square miles: Land, 3,466,556; Fresh Water, 228,307; Total, 3,694,863.

NOTE.—Dashes in this table indicate that comparable data or estimates are not available for the years so indicated.

1911.	1916.	1921.	1926.	1931.	1935. ¹	1936. ¹	1937. ^{1,2}	
93,728	92,000	88,615	87,000	88,038	89,000	92,000	93,000	1
492,338	505,000	523,837	515,000	512,846	527,000	537,000	542,000	2
351,889	368,000	387,876	396,000	408,219	429,000	435,000	440,000	3
2,005,776	2,154,000	2,360,665 ⁴	2,603,000	2,874,255	3,062,000	3,096,000	3,135,000	4
2,527,292	2,713,000	2,933,662	3,164,000	3,431,683	3,673,000	3,690,000	3,711,000	5
461,394	554,000	610,118	639,000	700,139	711,000	711,000	717,000	6
492,432	648,000	757,510	821,000	921,785	931,000	931,000	939,000	7
374,295	496,000	588,454	608,000	731,605	764,000	772,000	778,000	8
392,480	456,000	524,582	606,000	694,263	735,000	750,000	751,000	9
8,512	7,000	4,157	4,000	4,230	4,000	4,000	4,000	10
6,507	8,000	7,988	8,000	9,723	10,000	10,000	10,000	11
7,206,643	8,001,000	8,788,483 ⁵	9,451,000	10,376,786	10,935,000	11,028,000	11,120,000	
—	—	—	232,750	240,473	221,451	220,371	—	12
—	—	—	24.7	23.2	20.3	20.0	—	—
—	—	—	107,454	104,517	105,567	107,050	—	13
—	—	—	11.4	10.1	9.7	9.7	—	—
—	—	—	11,415	13,734	16,069	16,424	—	14
—	—	—	7,614	9,578	11,156	11,694	—	15
—	—	—	4,981	5,957	8,302	9,112	—	16
—	—	—	7,929	7,616	6,597	6,763	—	17
—	—	—	8,427	7,011	7,411	7,313	—	18
—	—	—	5,138	5,168	6,176	6,402	—	19
—	—	—	66,658	66,591	76,893	80,904	—	20
—	—	—	7.1	6.4	7.0	7.3	—	—
57	67	548	608	692	1,376	1,526	1,870	21
144,076	8,596	43,772	48,819	7,678	2,103	2,197	2,859	22
112,028	41,779	23,888	20,944	15,195	5,291	4,876	5,555	23
75,184	5,539	24,068	66,219	4,657	3,883	4,570	6,687	24
331,288	55,914	91,728	135,982	27,530	11,277	11,643	15,101	
108,968,715	—	140,887,903	—	163,119,231	—	—	—	25
48,733,823	—	70,769,548	—	85,733,309	—	—	—	26
—	—	1,386,126,000	1,714,477,000	839,881,000	952,431,000 ⁸	1,079,571,000	1,051,698,000	27
8,864,514	15,369,709	17,835,734	22,895,649	26,355,136	24,115,700	25,604,800	25,570,200	28
132,077,547	262,781,000	226,508,411	407,136,000	321,325,000	281,935,000	219,218,000	182,410,000	
104,816,825	344,096,400	374,178,601	442,221,000	123,550,000	173,065,000	205,327,000	182,384,000	
8,656,179	10,996,487	13,879,257	12,741,340	12,837,736	14,096,200	13,287,700	13,048,500	29
245,393,425	410,211,000	364,989,218	383,416,000	328,278,000	394,348,000	271,778,000	268,442,000	
86,796,130	210,957,500	180,989,587	184,098,000	77,970,000	93,409,000	116,267,000	114,665,000	
1,283,094	1,802,996	2,043,669	3,647,462	3,791,395	3,886,800	4,437,600	4,331,400	30
28,848,310	42,770,000	42,956,049	99,987,100	67,382,600	83,975,000	71,922,000	83,124,000	
14,653,697	35,024,000	33,514,070	52,059,000	17,465,000	24,465,000	49,512,000	41,984,000	
293,951	173,000	204,775	209,725	131,829	167,700	164,400	165,600	31
14,417,599	6,282,000	10,822,278	7,815,000	5,449,000	7,765,000	6,083,000	5,415,000	
5,774,039	6,747,000	7,081,140	7,780,000	2,274,000	3,494,000	4,258,000	3,303,000	
464,504	472,992	534,621	523,112	591,804	506,800	502,100	531,200	32
55,461,473	63,297,000	62,230,052	46,937,000 ¹¹	52,305,000 ¹¹	38,670,000 ¹¹	39,614,000 ¹¹	42,547,000 ¹¹	
27,426,765	50,982,300	44,635,547	69,204,000	22,359,000	30,854,000	45,125,000	27,143,000	
8,289,407	7,821,257	8,678,883	9,516,125	9,114,457	8,697,600	8,784,100	8,693,300	33
10,406,367	14,527,000	8,829,915	14,058,000	14,539,600	14,060,000	13,803,000	13,030,000	
90,115,531	168,547,900	174,110,386	170,473,000	110,110,000	107,133,000	105,703,000	97,309,000	
30,556,168	38,930,333	47,553,418	56,097,836	58,862,305	57,016,460	58,146,850	57,826,700	
384,513,795	886,494,900	933,045,936 ¹	1,104,983,100	435,966,400	512,176,900	612,300,400	553,823,100	

1931, 1935, and 1936 is not exact owing to changes in classification.

⁸ Fiscal year.

⁹ Revised

since the publication of the 1937 Year Book.

¹⁰ The figures for the decennial census years 1871-

1921 are for the next preceding years; those for 1871 are for the four original provinces only.

¹¹ Cwt.

¹² See Monthly Bulletin of Agricultural Statistics for May, 1921, for particulars of the values of field crops for the years 1871, 1881 and 1901.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

Item.		1871.	1881.	1891.	1901.	1906.
Live Stock and Poultry—						
1	Horses..... No.	836,743	1,059,358	1,470,572	1,577,493	—
	\$	—	—	—	118,279,419	—
2	Milch cows..... No.	1,251,209	1,595,800	1,857,112	2,408,677	—
	\$	—	—	—	69,237,970	—
3	Other cattle..... No.	1,373,081	1,919,189	2,263,474	3,167,774	—
	\$	—	—	—	54,197,341	—
4	Sheep..... No.	3,155,509	3,048,678	2,563,781	2,510,239	—
	\$	—	—	—	10,490,594	—
5	Swine..... No.	1,366,083	1,207,619	1,733,850	2,353,828	—
	\$	—	—	—	16,445,702	—
6	All poultry..... No.	—	—	14,105,102	17,922,658	—
	\$	—	—	—	5,723,890	—
	Total Values, Live Stock and Poultry..... \$	—	—	—	274,374,916	—
Dairying—²						
7	Total milk production..... ³ 000 lb.	—	—	—	6,866,834	—
8	Cheese, factory..... lb.	—	54,574,856	97,418,855	220,833,269	204,788,583 ⁴
	\$	—	5,457,486	9,741,886	22,221,430	23,597,639 ⁴
9	Butter, creamery..... lb.	—	1,365,912	3,654,364	36,066,739	45,930,294 ⁴
	\$	—	341,478	913,591	7,240,972	10,949,062 ⁴
10	Butter, home-made..... lb.	—	102,545,169	111,577,210	105,343,076	—
	\$	—	—	—	21,384,644	—
11	Other dairy products ⁵ \$	—	—	—	15,623,907	—
	Total Values, Dairy Products \$	—	22,743,939	30,315,214	66,470,953	—
Furs—						
12	Pelts taken..... No.	—	—	—	—	—
	\$	—	—	—	—	—
13	Value of animals on fur farms.. \$	—	—	—	—	—
Forestry—						
14	Primary forest production..... \$	—	—	—	—	—
15	Lumber production..... M ft. b.m.	—	—	—	—	—
	\$	—	—	—	—	—
16	Total Sawmill Products..... \$	—	—	—	—	—
17	Pulp and paper products..... \$	—	—	—	—	—
18	Exports of wood, wood products and paper..... \$	—	—	25,351,085	33,099,915	45,716,762
19	Fisheries..... \$	7,573,199	15,817,162	18,977,874	25,737,153	26,279,485
Mineral Production—						
20	Gold ⁷ oz.	105,187	63,524	45,018	1,167,216	556,415
	\$	2,174,412	1,313,153	930,614	24,128,503	11,502,120
21	Silver..... oz.	—	355,083 ⁸	414,523	5,539,192	8,473,379
	\$	—	347,271 ⁸	409,549	3,265,354	5,659,455
22	Copper..... lb.	—	3,260,424 ⁸	9,529,401	37,827,019	55,609,888
	\$	—	366,798 ⁸	1,226,703	6,096,581	10,720,474
23	Lead..... lb.	—	204,800 ⁸	88,665	51,900,958	54,608,217
	\$	—	9,216 ⁸	3,857	2,249,387	3,089,187
24	Zinc..... lb.	—	—	—	788,000 ⁹	1,154
	\$	—	—	—	36,011 ⁹	23,800
25	Nickel..... lb.	—	830,477 ¹⁰	4,035,347	9,189,047	21,490,955
	\$	—	498,286 ¹⁰	2,421,208	4,594,523	8,948,834
26	Pigiron..... long ton	—	22,167 ⁸	21,331	244,979	534,295
27	Coal..... short ton	1,063,742 ¹¹	1,537,106	3,577,749	6,486,325	9,762,601
	\$	1,763,423 ¹¹	2,688,621	7,019,425	12,694,245	19,732,019
28	Natural gas..... M cu. ft.	—	—	150,000 ¹²	339,476	583,523
	\$	—	—	755,298	622,392	569,753
29	Petroleum, crude..... bbl.	—	368,987	1,010,211	1,008,275	761,760
	\$	—	—	9,279	40,217	82,185
30	Asbestos..... short ton	—	—	999,878	1,259,759	2,060,143
	\$	—	69,843 ⁸	93,479	450,394	2,128,374
31	Cement..... bbl.	—	81,909 ⁸	108,561	660,030	3,170,859
	\$	—	—	—	—	—
	Totals, Mineral Production ¹³ \$	—	10,221,255 ¹⁴	18,976,616	65,797,911	79,286,697

¹The figures for 1937 are subject to revision. ²The figures for the decennial census years 1881-1921 are for the next preceding years. In the Censuses of 1881 and 1891 values only were given of factory butter and cheese, and quantities have been calculated by reckoning cheese at 10 cents per lb. and butter at 12 cents.

³ Revised since the publication of the 1937 Year Book.

⁴ 1907.

⁵ Previous

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

1911.	1916.	1921.	1926.	1931.	1935.	1936.	1937. ¹	
2,598,958	3,246,430	3,624,262	3,398,114	3,113,909	2,931,337	2,891,540	2,882,990	1
381,915,505	418,686,000	440,502,040	245,119,000	155,908,000	189,341,000	208,170,000	206,957,000	
2,595,255	2,835,552	3,324,653	3,839,191	3,371,923	3,849,200	3,885,300	3,940,400	2
109,575,526	198,896,000	203,555,836	201,236,000	143,616,000	134,000,000	143,316,000	156,467,000	
3,930,828	3,763,155	5,194,831	4,731,688	4,601,108	4,971,400	4,955,300	4,900,100	3
86,278,490	204,477,000	139,590,484	148,742,000	114,201,000	107,152,000	112,247,000	123,731,000	4
2,174,300	2,025,023	3,203,966	3,142,476	3,627,116	3,399,100	3,327,100	3,339,900	5
10,701,691	20,927,000	20,704,509	31,417,000	18,596,000	17,055,000	18,077,000	18,741,000	6
3,634,778	3,484,982	3,404,730	4,359,582	4,699,831	3,549,200	4,145,000	3,963,300	
26,986,621	60,700,000	36,893,244	69,958,000	32,773,000	41,778,000	45,488,000	48,802,000	
31,793,261	-	50,325,248	50,108,516	65,468,000	56,768,800	59,339,400	57,510,100	
14,653,773	-	31,750,247	51,037,000	43,138,000	40,292,000	40,366,000	42,954,000	
630,111,606	-	872,996,360	747,509,000	508,232,000	529,618,000	567,664,000	597,652,000	
9,806,741	-	10,976,235	13,407,340	15,772,852	16,527,913 ²	16,998,416	17,188,618	7
199,904,205	192,968,597	149,201,856	171,731,631	113,956,639	100,427,390	119,123,483	128,444,300	8
21,587,124	35,512,622	39,100,872	28,807,841	12,824,695	10,570,309	15,565,813	17,845,300	
64,489,398	82,564,130	111,691,718	177,209,287	225,955,246	240,918,779	250,931,779	246,587,300	9
15,597,807	26,966,355	63,625,203	61,753,390	50,198,878	52,228,133	57,662,160	63,217,000	
137,110,200	-	103,487,506	95,000,000	103,310,000	114,161,999 ³	114,026,000	113,084,000	10
30,269,497	-	50,180,952	28,252,777	21,450,000	19,237,000 ³	20,926,000	23,722,000	
35,927,426	-	-	158,490,971	106,916,119	111,451,981 ³	117,267,791	123,618,527	11
103,381,854	-	-	277,304,979	191,389,692	193,487,423 ³	211,421,764	228,403,127	
-	-	2,936,407	3,686,148	4,060,356	4,926,413	4,596,713	-	12
-	-	10,151,594	15,072,244	11,803,217	12,843,341	15,464,883	-	
-	-	5,977,545	11,153,838	8,497,237	9,381,825	9,837,813	-	13
-	-	168,054,024	204,436,328	141,123,930	115,461,779	134,804,228	-	14
4,918,202	3,490,550	2,869,307	4,185,140	2,497,553	2,973,169	3,412,151	-	15
75,830,954	58,365,349	82,448,585	101,071,260	45,977,843	47,911,256	61,965,540	-	
-	115,884,905 ⁴	116,891,191	135,182,592	62,769,253	65,905,132	80,343,291	-	16
-	92,074,684 ⁴	149,216,005	215,370,274	174,733,954	162,651,282	185,144,603	-	17
56,334,695	83,116,282	284,561,478	278,674,960	230,604,474	160,932,709	181,831,743	223,918,476	18
29,965,142	35,860,708	34,931,935	56,360,633	30,517,306	34,427,854	39,165,055	-	19
473,159	930,492	926,329	1,754,228	2,693,892	3,284,890	3,748,028	4,095,872	20
9,781,077	19,234,976	19,148,920	36,263,110	58,093,396	115,595,279	131,293,421	143,314,561	
32,559,044	25,459,741	13,543,198	22,371,924	20,562,247	16,618,558	18,334,487	22,683,052	21
17,355,272	16,717,121	8,485,355	13,894,531	6,141,943	10,767,148	8,273,804	10,180,371	
55,648,011	117,150,028	47,620,820	133,094,942	292,304,390	418,997,700	421,027,732	531,041,878	22
6,886,998	31,867,150	5,953,555	17,490,300	24,114,065	32,311,960	39,514,101	69,049,734	
23,784,969	41,497,615	66,679,592	283,801,265	267,342,482	339,105,079	383,180,909	411,221,232	23
827,717	3,532,692	3,828,742	19,240,661	7,260,183	10,624,772	14,993,869	21,013,404	
1,877,479	23,364,760	53,089,356	149,938,105	237,245,451	320,649,859	333,182,736	370,418,073	24
108,105	2,991,623	2,471,310	11,110,413	6,059,249	9,936,908	11,045,007	18,157,894	
34,098,744	82,958,564	19,293,660	65,714,294	65,666,320	138,516,240	169,739,393	224,790,974	25
10,229,623	29,035,498	6,752,571	14,374,163	15,267,453	35,345,103	43,876,525	59,507,176	
819,228	1,043,979	593,829	757,317	420,038	599,875	679,231	898,855	26
11,323,388	14,483,395	15,057,493	16,478,131	12,243,211	13,888,006	15,229,182	15,775,432	27
26,467,646	38,817,481	72,451,656	59,875,094	41,207,682	45,963,110	45,791,934	48,662,559	
-	25,467,458	14,077,601	19,208,209	25,874,723	24,910,786	28,113,348	29,599,198	28
1,917,678	3,958,029	4,594,164	7,557,174	9,026,754	9,363,141	10,762,243	11,738,822	
291,092	198,123	187,540	364,444	1,542,573	1,446,620	1,500,374	2,978,268	29
357,073	392,284	641,533	1,311,665	4,211,674	3,492,188	3,421,767	5,370,981	
127,414	154,149	92,761	279,403	164,296	210,467	301,287	410,026	30
2,943,108	5,228,869	4,906,230	10,099,423	4,812,886	7,054,614	9,968,183	14,505,791	
5,692,915	5,369,560	5,752,885	8,707,021	10,161,658	3,648,086	4,508,718	6,168,971	31
7,644,537	6,547,728	14,195,143	13,013,283	15,826,243	5,580,043	6,908,192	9,095,867	
103,220,994	177,201,534	171,923,342	240,437,123	230,434,726	312,344,457	361,919,372	456,793,260	

to 1931 this item does not include skim milk and buttermilk.
include exchange equalization.

⁸ 1887.

⁹ 1898.

⁶ 1917.

¹⁰ 1899.

⁷ As from 1932 the values

¹¹ 1874.

¹² 1892.

¹³ Includes other items not specified.

¹⁴ 1886.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

	Item.	1871.	1881.	1891.	1901.	1906.
Central Electric Stations—						
1	Power houses..... No.	—	—	80	58	157
2	Capital invested..... \$	—	—	4, 113, 771	11, 891, 025	80, 393, 445
3	Kilowatt hours generated ² No.	—	—	—	—	—
4	Customers..... "	—	—	—	—	—
Water Power—						
5	Turbine H.P. installed..... No.	—	—	71, 219	238, 902	608, 002
Manufactures—³						
6	Employees..... No.	187, 942	254, 935	272, 033	339, 173	383, 920
7	Capital..... \$	77, 964, 020	165, 302, 623	353, 213, 000 ⁴	446, 916, 487	833, 916, 155
8	Salaries and wages..... \$	40, 851, 009	59, 429, 002	79, 234, 311	113, 249, 350	162, 155, 578
9	Values of materials used in.... \$	124, 907, 846	179, 918, 593	250, 759, 292 ⁴	266, 527, 858	—
10	Products—					
	Gross..... \$	221, 617, 773	309, 676, 068	368, 696, 723	481, 053, 375	706, 446, 578
	Net..... \$	96, 709, 927	129, 757, 475	117, 937, 431	214, 525, 517	—
Construction—						
11	Values of contracts awarded... \$	—	—	—	—	—
Wholesale and Retail Trade—						
Wholesale—						
12	Establishments..... No.	—	—	—	—	—
13	Employees..... "	—	—	—	—	—
14	Net sales..... \$	—	—	—	—	—
Retail—						
15	Stores..... No.	—	—	—	—	—
16	Employees, full-time..... "	—	—	—	—	—
17	Net sales..... \$	—	—	—	—	—
Retail Services—						
18	Establishments..... No.	—	—	—	—	—
19	Employees, full-time..... "	—	—	—	—	—
20	Receipts..... \$	—	—	—	—	—
External Trade (fiscal years)—						
21	Exports ⁹ \$	57, 630, 024	83, 944, 701	88, 671, 738	177, 431, 386	235, 483, 956
22	Imports ¹⁰ \$	84, 214, 388	90, 488, 329	111, 533, 954	177, 930, 919	283, 740, 280
	Totals, External Trade..... \$	141, 844, 412	174, 433, 030	200, 205, 692	355, 362, 305	519, 224, 236
23	Total exports to British Empire..... \$	—	—	47, 137, 203	100, 748, 097	138, 421, 222
24	Exports to United Kingdom... \$	21, 733, 556	42, 637, 219	43, 243, 784	92, 857, 525	127, 456, 465
25	Total imports from British Empire..... \$	—	—	44, 337, 052	46, 653, 228	83, 789, 434
26	Imports from United Kingdom \$	48, 498, 202	42, 885, 142	42, 018, 943	42, 820, 334	69, 183, 915
27	Exports to United States..... \$	29, 164, 358	34, 038, 431	37, 743, 430	67, 983, 673	83, 546, 306
28	Imports from United States... \$	27, 185, 586	36, 338, 701	52, 033, 477	107, 377, 906	169, 256, 452
Exports, Domestic, by Chief Items—						
29	Wheat..... bu.	1, 748, 977	2, 523, 673	2, 108, 216	9, 739, 758	40, 399, 402
	"..... \$	1, 981, 917	2, 593, 820	1, 583, 084	6, 871, 939	33, 658, 391
30	Wheat flour..... bbl.	306, 339	439, 728	296, 784	1, 118, 700	1, 532, 014
	"..... \$	1, 609, 849	2, 173, 108	1, 388, 578	4, 015, 226	6, 179, 825
31	Oats..... bu.	542, 386	2, 926, 532	260, 569	8, 155, 063	2, 700, 303
	"..... \$	231, 227	1, 191, 873	129, 917	2, 490, 521	1, 083, 347
32	Hay..... ton	23, 487	168, 381	65, 083	252, 977	206, 714
	"..... \$	290, 217	1, 813, 208	559, 489	2, 097, 882	1, 529, 941
33	Bacon and hams, shoulders... cwt.	103, 444	103, 547	75, 541	1, 055, 495	1, 029, 079
	and sides..... "	1, 018, 918	758, 334	628, 469	11, 778, 446	12, 086, 868
34	Butter..... lb.	15, 439, 266	17, 649, 491	3, 768, 101	16, 335, 528	34, 031, 525
	"..... \$	3, 065, 234	3, 573, 034	602, 175	3, 295, 663	7, 075, 539
35	Cheese..... lb.	8, 271, 439	49, 255, 523	106, 202, 140	195, 926, 397	215, 834, 543
	"..... \$	1, 109, 906	5, 510, 443	9, 508, 800	20, 696, 951	24, 433, 169
36	Gold, raw..... \$	163, 037	767, 318	554, 126	24, 445, 156	12, 991, 916
37	Silver..... oz.	—	—	—	4, 022, 019	7, 261, 527
	"..... \$	595, 261	34, 494	238, 367	2, 420, 750	4, 310, 528
38	Copper ¹² lb.	6, 246, 000	39, 604, 000	10, 994, 498	26, 345, 776	44, 282, 348
	"..... \$	120, 121	150, 412	505, 196	2, 659, 261	7, 148, 633

¹ The figures for 1937 are subject to revision.² In thousands.³ The statistics of manufactures in 1871 and 1881 include works employing fewer than 5 hands; those of 1891, 1901, 1911 and 1916 are for works employing only 5 hands and over except in the case of butter and cheese factories, flour and grist mills, electric light plants, lumber, lath and shingle mills, lime kilns, brick and tile works, and fish canneries. The figures shown are for the preceding years in each case. From 1922 statistics are exclusive of construction, hand trades, repair and custom work. Figures for 1925-35 include non-ferrous metal smelting not included in earlier years.⁴ Includes all establishments irrespective of the number of employees.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

1911.	1916.	1921.	1926.	1931.	1935.	1936.	1937. ¹	
266	307	510	595	559	566	561	—	1
110,838,746	248,573,546	484,669,451	756,220,066	1,229,988,951	1,459,821,168	1,483,116,649	—	2
—	—	5,614,132	12,093,445	16,330,867	23,283,033	25,402,282	—	3
—	—	973,212	1,337,562	1,632,792	1,694,703	1,740,793	—	4
1,363,134	2,222,169	2,754,157	4,549,383	6,666,337	7,909,115	7,945,590	8,112,751	5
515,203	—	456,076	581,539	557,426	582,874	594,359	—	6
1,247,583,609	1,958,705,230	3,190,026,358	3,981,569,590	4,961,312,408	4,698,991,853	3,271,263,531	—	7
241,008,416	283,311,505	518,785,137	653,850,933	624,545,561	590,326,904	612,071,434	—	8
601,509,018	791,943,433	1,366,893,685	1,728,624,192	1,223,880,011	1,420,885,153	1,624,213,996	—	9
1,165,975,639	1,381,547,225	2,576,037,029	3,221,269,231	2,698,461,862	2,807,337,381	3,002,403,814	—	10
564,466,621	589,603,792	1,209,143,344	1,406,574,164 ²	1,390,409,237 ²	1,302,179,099 ²	1,289,592,672 ²	—	—
345,425,000	99,311,000	240,133,300	372,947,900	315,482,000	160,305,000	162,588,000	224,056,700	11
—	—	—	—	13,140 ⁶	—	—	—	12
—	—	—	—	90,564 ⁶	—	—	—	13
—	—	—	—	3,325,210,300 ⁶	—	—	—	14
—	—	—	—	125,003 ⁶	—	—	—	15
—	—	—	—	238,683 ⁶	—	—	—	16
—	—	—	—	2,755,569,900 ⁶	2,053,699,000 ⁷	2,202,200,000 ⁷	—	17
—	—	—	—	42,223 ⁶	—	—	—	18
—	—	—	—	55,257 ⁶	—	—	—	19
—	—	—	—	249,455,900 ⁶	—	—	—	20
274,316,553	741,610,638	1,189,163,701	1,320,568,147	799,742,667	756,625,925	849,030,417	1,061,181,906	21
452,724,603	508,201,134	1,240,158,882	927,328,732	906,612,695	522,431,153	562,719,063	671,875,566	22
727,041,156	1,249,811,772	2,429,322,583	2,247,896,879	1,706,355,362	1,279,057,078	1,411,749,480	1,733,057,472	—
148,967,442	482,529,733	403,452,219	598,567,995	292,864,396	358,199,478	399,311,479	495,598,105	23
132,156,924	451,852,399	312,844,871	508,237,560	219,246,499	290,885,237	321,556,798	407,996,698	24
129,467,647	105,229,977	266,002,688	208,820,128	204,898,426	156,186,471	177,721,310	198,165,842	25
109,934,753	77,404,361	213,973,562	163,731,210	149,497,392	111,682,490	117,874,822	129,507,885	26
104,115,823	201,106,488	542,322,967	480,199,723	349,660,563	304,721,354	360,302,426	435,014,544	27
275,824,265	370,880,549	856,176,820	608,618,542	584,407,018	303,639,972	319,479,594	393,720,662	28
45,802,115	157,745,469	129,215,157	249,679,470	217,243,037	165,701,983	179,124,180	227,996,513	29
45,521,134	172,896,445	310,952,138	364,364,388	177,419,769	132,441,685	148,576,975	223,461,009	—
3,049,046	6,400,214	6,017,032	10,084,974	7,218,188	4,936,827	4,858,947	4,771,007	30
13,854,790	35,767,044	66,520,490	69,687,598	32,876,234	18,386,040	19,382,617	21,587,038	—
5,431,662	26,816,322	14,321,048	43,058,283	3,258,501	12,873,595	12,739,083	8,142,132	31
2,144,846	14,637,849	14,152,033	24,237,692	1,146,266	4,915,135	4,520,822	3,176,469	—
326,132	255,407	179,398	368,787	156,722	102,355	58,658	204,592	32
2,723,291	5,849,426	4,210,594	3,711,840	1,590,657	1,137,587	613,215	1,521,953	—
598,745	1,536,517	982,338	1,253,760	121,770	1,276,051	1,201,012	1,757,048	33
8,526,332	27,090,113	31,492,407	28,590,301	2,914,273	19,998,575	19,407,285	28,801,291	—
3,142,682	3,441,183	9,739,414	23,303,865	1,162,900	446,600	7,691,100	5,140,600	34
744,288	1,018,769	5,128,831	8,773,125	389,419	104,758	1,795,784	1,183,633	—
181,895,724	168,961,583	133,620,340	148,333,500	79,590,400	60,213,000	58,544,900	80,739,100	35
20,739,507	26,690,500	37,146,722	33,718,587	12,989,726	6,480,947	6,789,588	11,236,543	—
5,344,465	16,870,394	3,038,779	25,968,094	17,832,608	3,725,211 ¹¹	4,802,029 ¹¹	6,497,281 ¹¹	36
33,731,010	27,794,566	13,331,050	18,392,415	24,695,827	11,006,242	20,191,018	16,187,592	37
17,269,168	14,298,351	11,127,432	12,365,576	8,927,216	5,357,657	12,473,960	7,243,750	—
55,005,342	111,046,300	36,167,900	61,090,800	62,997,100	33,161,100	37,897,900	52,172,900	38
5,575,033	14,670,073	4,336,972	7,037,206	5,629,512	1,454,256	2,024,180	3,963,652	—

⁵ See footnote 1 to p. 405 of this volume.⁶ Census figures for calendar year 1930.⁷ Estimated

on basis of intercensal survey of larger establishments.

⁸ Revised since the publication of the 1937

Year Book.

⁹ Exports of domestic merchandise only.¹⁰ Imports of merchandise for home

consumption.

¹¹ Exclusive of exports of domestic gold bullion which, valued at the average current¹² Copper

market price, amounted to \$96,725,931 in 1935, \$83,414,854 in 1936, and \$76,667,269 in 1937.

fine, contained in ore, matte, regulus, etc.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

	Item.	1871.	1881.	1891.	1901.	1906.
Exports, Domestic, by Chief Items—concluded.						
1	Nickel..... lb.	—	—	5,352,043	9,537,558	23,959,841
	\$	—	—	240,499	958,365	2,166,936
2	Coal..... ton	318,287	420,055	833,684	1,888,538	1,820,511
	\$	662,451	1,123,091	2,916,465	5,307,060	4,643,198
3	Asbestos..... ton	—	—	7,022	26,715	57,075
	\$	—	—	513,909	864,573	1,578,137
4	Wood-pulp..... cwt.	—	—	—	—	—
	\$	—	—	280,619	1,937,207	3,478,150
5	Newsprint paper..... cwt.	—	—	—	—	—
	\$	—	—	—	—	—
Exports, Domestic, by Classes—						
6	Vegetable products (except chemicals, fibres and wood). \$	—	—	13,742,557	25,541,567	55,828,252
7	Animals and their products (except chemicals and fibres) \$	—	—	36,399,140	68,465,332	84,570,644
8	Fibres, textiles and textile products..... \$	—	—	872,628	1,880,539	2,602,903
9	Wood, wood products and paper \$	—	—	25,351,085	33,099,915	45,716,762
10	Iron and its products..... \$	—	—	556,527	3,778,897	4,705,296
11	Non-ferrous metals and their products..... \$	—	—	1,618,955	33,395,096	28,455,786
12	Non-metallic minerals and their products (except chemicals) \$	—	—	3,988,584	7,356,444	7,817,475
13	Chemicals and allied products. \$	—	—	851,211	791,855	1,784,800
14	All other commodities..... \$	—	—	5,291,051	3,121,741	4,002,038
	Totals, Exports, Domestic.. \$	57,630,024	83,944,701	88,671,738	177,431,386	235,483,956
Imports for Consumption—						
15	Vegetable products (except chemicals, fibres and wood). \$	—	—	24,212,140	38,036,146	50,307,368
16	Animals and their products (except chemicals and fibres) \$	—	—	8,080,862	14,022,896	23,616,835
17	Fibres, textiles and textile products..... \$	—	—	28,670,141	37,284,752	59,292,868
18	Wood, wood products and paper \$	—	—	5,203,490	8,196,901	14,841,947
19	Iron and its products..... \$	—	—	15,142,615	29,955,936	49,436,840
20	Non-ferrous metals and their products..... \$	—	—	3,810,626	7,167,318	17,533,430
21	Non-metallic minerals and their products (except chemicals) \$	—	—	14,139,024	21,255,403	33,757,284
22	Chemicals and allied products \$	—	—	3,697,810	5,684,999	8,269,169
23	All other commodities..... \$	—	—	8,577,246	16,326,568	27,184,539
	Totals, Imports..... \$	84,214,388	90,488,329	111,533,954	177,930,919	283,740,280
Steam Railways—						
24	Miles in operation..... No.	2,695	7,331	13,838	18,140	21,423
25	Capital..... \$	257,035,18 ²	284,419,293	632,061,440	816,110,837	1,065,881,629
26	Passengers..... No.	5,190,416 ³	6,943,671	13,222,568	18,385,722	27,989,782
27	Freight..... ton	5,670,836 ³	12,065,323	21,753,021	36,999,371	57,966,713
28	Earnings..... \$	19,470,539 ³	27,987,509	48,192,089	72,898,749	125,322,865
29	Expenses..... \$	15,775,532 ³	20,121,418	34,960,449	50,368,726	87,129,434
Electric Railways—						
30	Miles in operation..... No.	—	—	—	553	814
31	Capital..... \$	—	—	—	—	—
32	Passengers..... No.	—	—	—	120,934,656	237,655,074
33	Freight..... ton	—	—	—	287,926	506,024
34	Earnings..... \$	—	—	—	5,768,283	10,966,871
35	Expenses..... \$	—	—	—	3,435,162	6,675,037
Road Transportation—						
36	Highways, total mileage.....	—	—	—	—	—
37	Capital expenditure on.....	—	—	—	—	—
38	Motor vehicles registered..... No.	—	—	—	—	1,447
39	Total provincial revenue from licences and operation..... \$	—	—	—	—	—
Canals—						
40	Passengers carried..... No.	100,377	118,136	146,336	190,428	256,500
41	Freight..... ton	3,955,621	2,853,230	2,902,526	5,665,259	10,523,185

¹ The figures for 1937 are subject to revision.² 1876.³ 1875.⁴ Duplication elimin-

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

1911.	1916.	1921.	1926.	1931.	1935.	1936.	1937. ¹	
34,767,523	70,443,000	47,018,300	71,081,400	81,929,300	119,502,500	160,925,200	179,036,100	1
3,842,332	7,714,769	9,405,291	12,829,244	18,246,375	28,422,859	41,644,380	45,882,184	
2,315,171	1,971,124	2,277,202	753,842	534,710	323,056	423,484	408,157	2
6,014,095	6,032,765	16,501,478	4,083,713	2,896,837	1,499,128	1,941,942	1,755,548	
69,829	88,833	191,299	269,652	219,541	158,143	218,098	320,987	3
2,076,477	2,962,010	12,633,389	9,920,900	7,719,974	5,153,508	7,611,844	10,569,302	
6,588,655	8,144,019	14,363,006	19,846,381	13,862,122	12,249,540	13,722,878	15,792,020	4
5,715,532	10,376,548	71,552,037	49,909,870	35,061,689	25,869,296	28,103,970	33,210,237	
—	9,264,080	15,112,586	29,537,366	44,848,479	47,850,462	53,261,626	62,899,709	5
3,092,437	17,974,292	78,922,137	102,238,568	127,352,706	82,147,844	90,761,379	110,176,448	
84,368,425	257,019,215	482,140,444	606,058,672	292,280,037	226,233,097	242,861,877	346,450,628	6
69,693,263	138,375,083	188,359,937	190,975,417	83,714,772	86,848,144	100,932,110	133,940,776	7
1,818,931	15,097,691	18,783,884	8,940,046	6,504,182	7,523,144	10,273,697	12,830,212	8
56,334,695	83,116,282	284,561,478	278,674,960	230,604,474	160,932,709	181,831,743	223,918,476	9
9,884,346	66,127,099	76,500,741	74,735,077	38,937,661	40,736,038	52,368,087	53,173,175	10
34,000,996	66,036,542	45,939,377	102,688,626	95,652,063	191,345,386	212,547,372	230,152,314	11
10,038,493	12,096,973	40,345,345	24,712,584	21,107,780	15,654,323	19,083,643	26,081,028	12
3,088,840	15,961,226	20,142,826	17,354,389	12,825,852	15,270,064	16,018,391	19,237,697	13
5,088,564	87,780,527	32,389,669	16,428,376	18,115,846	12,083,020	13,113,527	15,897,603	14
274,316,553	741,610,638	1,189,163,701	1,320,568,147	799,742,667	756,625,925	849,030,417	1,061,181,906	
79,214,041	95,421,161	259,431,110	203,417,431	177,597,464	109,418,595	110,342,532	131,400,217	15
30,671,908	38,657,514	61,722,390	49,185,558	45,995,756	19,957,477	24,314,220	27,863,224	16
87,916,282	96,191,485	243,608,342	184,761,831	130,717,022	81,798,280	89,814,164	104,811,304	17
26,851,936	18,277,420	57,449,384	40,403,096	46,073,343	21,199,687	23,271,631	28,927,720	18
91,968,180	92,065,895	245,625,703	181,196,800	192,614,200	100,056,145	114,253,715	150,239,139	19
27,579,572	29,431,592	55,651,319	47,692,985	61,899,298	28,496,629	33,685,919	37,037,954	20
53,430,475	53,490,284	206,095,113	139,033,940	153,578,658	102,428,037	105,421,236	116,948,261	21
12,471,730	19,217,505	37,887,449	28,404,276	35,650,772	28,872,053	29,919,921	33,105,448	22
42,620,479	65,448,278	72,688,072	53,232,815	62,486,182	30,204,250	31,695,725	41,542,299	23
452,724,603	508,201,134	1,240,158,882	927,328,732	906,612,695	522,431,153	562,719,063	671,875,566	
25,400	36,985	39,192	40,350	42,280	42,916	42,552	—	24
1,528,689,201	1,893,125,774	2,164,687,636	3,506,758,047	4,232,022,088	4,460,264,309	4,487,605,510	—	25
37,097,718	43,503,459	46,793,251	42,686,166	26,596,812	20,031,839	20,497,616	—	26
79,884,282	89,237,156 ^a	83,730,829 ^a	105,221,906 ^a	74,129,694 ^a	69,141,100 ^a	75,846,566 ^a	—	27
188,733,494	261,888,654	458,008,891	493,599,754	358,549,382	310,107,155	334,768,557	—	28
131,034,785	180,542,259	422,581,205	389,503,452	321,025,588	263,942,899	283,345,968	—	29
1,224	1,674	1,680 ^a	1,677 ^a	1,379 ^a	1,268 ^a	1,247	—	30
111,532,347	154,895,584	177,187,436	215,808,520	215,818,096	207,191,039	205,062,353	—	31
426,296,792	580,094,167	719,305,441	748,710,836	720,468,361	600,728,313	614,890,897	—	32
1,228,362	1,936,674	2,282,292	3,489,183	1,977,441	2,057,897	2,265,023	—	33
20,356,952	27,416,285	44,536,832	51,723,199	49,088,310	40,442,320	41,391,927	—	34
12,096,134	18,099,906	35,945,316	36,453,709	35,367,068	28,009,013	28,807,311	—	35
—	—	—	378,269	378,094	410,808	410,448	—	36
—	—	—	—	66,250,229	42,438,560	34,966,916	—	37
21,783	128,328	464,805	832,268	1,200,668	1,176,116	1,240,124	1,319,702	38
—	—	—	21,795,184	42,231,027	54,623,623	61,026,358	—	39
304,904	263,648	230,129	197,561	126,633	56,473	59,855	67,334	40
38,030,353	23,583,491	9,407,021	13,477,663	16,189,074	18,205,989	21,468,816	23,351,000	41

ated.

^a Revised since the publication of the 1937 Year Book.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

	Item.	1871.	1881.	1891.	1901.	1906.
Shipping—						
1	Vessels on the registry..... No. ton	— —	7,394 1,310,896	7,015 1,005,475	6,697 666,276	7,516 663,415
Sea-Going—						
2	Entered..... ton	2,521,573	4,032,946	5,273,935	7,514,732	8,895,353
3	Cleared..... “	2,594,460	4,071,391	5,421,261	7,028,330	7,948,076
4	Totals..... “	5,116,033	8,104,337	10,695,196	14,543,062	16,843,429
Inland International—						
5	Entered..... ton	4,055,198	2,934,503	4,098,434	5,720,575	9,352,653
6	Cleared..... “	3,954,797	2,763,592	4,009,018	5,766,171	8,536,090
7	Totals..... “	8,009,995	5,698,095	8,107,452	11,486,746	17,888,743
Coastwise—						
8	Entered..... ton	—	7,664,863	12,835,774	17,927,959	23,543,604
9	Cleared..... “	—	7,451,903	12,150,356	16,516,837	22,780,458
10	Totals..... “	—	15,116,766	25,986,130	34,444,796	46,324,062
Air Transportation—						
11	Mileage flown.....	—	—	—	—	—
12	Passenger miles..... No.	—	—	—	—	—
13	Freight carried..... lb.	—	—	—	—	—
14	Mail carried..... “	—	—	—	—	—
Communications—						
Telegraphs—						
15	Government, miles of line.... No.	—	1,947	2,699	5,744	6,829
16	Other, miles of line..... “	—	—	27,866	30,194	31,506
Telephones—						
17	Numbers.....	—	—	—	63,192	—
18	Pole line mileage.....	—	—	—	14,103	—
19	Employees..... No.	—	—	—	—	—
Radio—						
20	Receiving sets..... No.	—	—	—	—	—
Post Office—						
21	Revenue..... \$	803,637	1,344,970	2,515,824	3,421,192	5,933,342
22	Expenditure..... \$	994,876	1,876,658	3,161,676	3,837,376	4,921,577
23	Money orders issued..... \$	4,546,434	7,725,212	12,478,178	17,956,258	37,355,673
Dominion Finance—						
24	Customs revenue..... \$	11,841,105	18,406,092	23,305,218	28,293,930	46,053,377
25	Excise revenue..... \$	4,295,945	5,343,022	6,914,850	10,318,266	14,010,220
26	War tax revenue..... \$	—	—	—	—	—
27	Income tax..... \$	—	—	—	—	—
28	Sales tax..... \$	—	—	—	—	—
29	Total receipts from taxation.... \$	16,320,369	23,942,139	30,220,068	38,612,196	60,063,597
30	Per capita receipts from taxation..... \$	4.42	5.54	6.25	7.19	9.69
31	Total revenue..... \$	19,335,561	29,635,298	38,579,311	52,514,701	80,139,360
32	Revenue per capita..... \$	5.24	6.85	7.98	9.78	12.93
33	Total expenditure..... \$	19,293,478	33,796,643	40,793,208	57,982,866	83,277,642
34	Expenditure per capita..... \$	5.23	7.82	8.44	10.79	13.44
35	Gross debt..... \$	115,492,683	199,861,537	289,899,230	354,732,433	392,269,680
36	Assets..... \$	37,786,165	44,465,757	52,090,199	86,252,429	125,226,703
	Net Debt..... \$	77,706,518	155,395,780	237,809,031	268,480,004	267,042,977
Provincial Finance—						
37	Revenue, Ordinary, Totals.... \$	5,518,946	7,858,698	10,693,815	14,074,991	23,027,122
38	Expenditure, Ordinary, Totals. \$	4,935,008	8,119,701	11,628,353	14,146,059	21,169,868
Note Circulation—						
39	Bank notes..... \$	20,914,637	28,516,692	33,061,042	50,601,205	70,638,870
40	Dominion or Bank of Canada notes ⁶ \$	7,244,341	14,539,795	16,176,316	27,898,509	49,941,426

¹ The figures for 1937 are subject to revision.³ As at June 30.² Excluding United States lines of Canadian National Telegraphs.⁴ Excluding employees on rural lines in Saskatchewan.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

1911.	1916.	1921.	1926.	1931.	1935.	1936.	1937. ¹	
8,088 770,446	8,659 943,131	7,482 1,223,973	8,193 1,348,935	8,966 1,484,423	8,894 1,389,343	9,373 1,367,071	- -	1
11,919,339 10,377,847 22,297,186	12,616,927 12,210,723 24,827,650	12,516,503 12,400,226 24,916,729	22,837,720 22,817,276 45,654,996	28,064,762 26,535,387 54,600,149	28,512,257 28,547,591 57,059,848	28,895,751 29,156,876 58,052,627	31,145,065 31,802,946 62,948,011	2 3 4
13,286,102 11,846,257 25,132,359	16,486,778 16,406,670 32,893,448	14,828,454 14,903,447 29,731,901	14,117,099 15,474,732 29,591,831	17,769,690 18,542,037 36,311,727	14,772,884 14,602,087 29,374,971	14,472,022 14,998,858 29,470,880	15,564,121 16,074,614 31,638,735	5 6 7
34,280,669 32,347,265 66,627,934	35,624,074 33,085,350 68,709,424	28,567,545 27,773,668 56,341,213	41,770,480 41,117,175 82,887,655	47,134,652 47,540,555 94,675,207	43,146,037 42,827,149 85,973,186	42,979,361 41,815,616 84,794,977	45,973,830 45,447,342 91,421,172	8 9 10
- - - -	- - - -	294,449 - 79,850 -	393,103 631,715 724,721 3,960	7,046,276 4,073,552 2,372,467 470,461	7,522,102 7,936,950 26,439,224 1,126,084	7,100,401 ² 11,272,716 ² 25,337,719 1,107,060	9,339,743 14,744,384 26,226,260 1,221,869	11 12 13 14
8,446 33,905	10,699 38,552	11,207 41,577	10,722 42,239 ²	9,300 43,928	8,884 44,150	8,893 44,014	- -	15 16
302,759 ³ - 10,425 ^{3,4}	548,421 ³ - 15,247 ^{3,4}	902,090 178,093 19,943 ⁴	1,201,008 201,604 23,083 ⁴	1,364,200 222,196 23,825 ⁴	1,208,815 207,916 17,414 ⁴	1,266,228 210,926 17,775 ⁴	- - -	17 18 19
-	-	-	134,486	523,100	812,335	862,109	1,038,500	20
9,146,952 7,954,223 70,614,862	18,858,410 16,009,139 94,469,871	26,331,119 24,661,262 173,523,322	31,024,464 30,499,686 177,840,231	30,416,106 36,292,603 167,749,651	31,248,324 28,974,316 114,832,665	32,507,888 30,100,102 121,810,839	34,274,552 30,538,575 133,155,222	21 22 23
71,838,089 16,869,837 - - - 88,707,926	98,617,695 22,428,492 3,620,782 - - 124,666,969	163,266,804 37,118,367 168,385,327 46,381,824 38,114,539 368,770,498	127,355,144 42,923,549 157,296,320 55,571,962 74,025,093 327,575,013	131,208,955 57,746,808 107,320,633 71,048,022 20,783,944 296,276,396	76,561,975 43,189,655 181,118,715 66,808,066 72,447,311 304,443,729	74,004,560 44,409,797 197,484,627 82,709,803 77,551,974 317,311,809	83,771,091 45,956,857 256,822,921 102,365,242 112,832,259 386,550,869	24 25 26 27 28 29
12-31 117,780,409 16-34 122,861,250 17-04 474,941,437 134,899,435	15-58 172,147,838 21-52 339,702,502 42-46 936,987,802 321,831,631	41-96 436,292,185 49-64 528,302,513 60-11 2,902,482,117 561,603,133 ⁵	34-66 382,893,009 40-52 355,186,423 37-59 2,768,779,184 379,048,085 ⁵	28-55 356,160,876 34-32 440,008,855 42-41 2,610,265,698 348,653,762 ⁵	27-84 361,871,929 33-09 478,004,747 43-71 3,205,956,369 359,845,411 ⁵	28-77 372,595,996 33-79 532,585,555 48-29 3,431,944,027 425,843,509 ⁵	34-76 454,153,747 40-84 532,005,432 47-84 3,542,521,139 458,568,937 ⁵	30 31 32 33 34 35 36
340,042,052	615,156,171	2,340,878,984	2,389,731,099	2,261,611,937	2,846,110,958	3,006,100,517	3,083,952,202	
40,706,948 38,144,511	50,015,795 53,826,219	102,030,458 102,569,515	146,450,904 144,183,178	179,143,480 190,754,202	160,567,695 181,175,686	232,616,182 248,141,808	- -	37 38
89,982,223 99,921,354	126,691,913 176,816,006	194,621,710 271,531,162	168,885,995 190,004,824	141,969,350 153,079,362	125,644,102 127,335,340	119,507,306 105,275,223	110,259,134 141,053,457	39 40

⁵ Active assets only.⁶ As at June 30 from 1871 to 1906. Monthly averages from 1911 to 1937.⁷ Revised since the publication of the 1937 Year Book.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

	Item.	1871.	1881.	1891.	1901.	1906.
Chartered Banks—						
1	Capital, paid-up..... \$	37,095,340	59,534,977	60,700,697	67,035,615	91,035,604
2	Assets..... \$	125,273,631	200,613,879	269,307,032	531,829,324	878,512,076
3	Liabilities to the public..... \$	80,250,974	127,176,249	187,332,325	420,003,743	713,790,553
4	Deposits payable on demand... \$	—	—	—	95,169,631	165,144,569
5	Deposits payable after notice... \$	—	—	—	221,624,664	381,778,705
6	Totals, Deposits ² \$	56,287,391	94,346,481	148,396,968	349,573,327	605,962,513
Savings Banks—						
7	Deposits in Post Office..... \$	2,497,260	6,208,227	21,738,648	39,950,813	45,736,488
8	Deposits in Government Banks \$	2,072,037	9,628,445	17,661,378	16,093,146	16,174,134
9	Deposits in Special Banks..... \$	5,766,712	7,685,888	10,982,232	19,125,097	27,399,194
Loan Companies—⁴						
10	Assets..... \$	8,392,464	73,906,638	125,041,146	158,523,307	232,076,447
11	Liabilities..... \$	8,392,958	71,965,017	123,915,704	158,523,307	232,076,447
12	Deposits..... \$	2,399,136	13,460,268	18,482,959	20,756,910	23,046,194
Trust Companies—						
13	Shareholders' assets..... \$	—	—	—	—	—
14	Trust funds, liabilities..... \$	—	—	—	—	—
Dominion Fire Insurance—						
15	Amounts at risk, Dec. 31..... \$	228,453,784	462,210,968	759,602,191	1,038,687,619	1,443,902,244
16	Premium income for each year. \$	2,321,716	3,827,116	6,168,716	9,650,348	14,687,963
17	Losses paid during each year... \$	1,549,199	3,169,824	3,905,697	6,774,956	6,584,291
Provincial Fire Insurance—						
18	Amounts at risk, Dec. 31..... \$	—	—	—	—	—
19	Premium income for each year.. \$	—	—	—	—	—
20	Losses paid during each year... \$	—	—	—	—	—
Dominion Life Insurance—⁶						
21	Amounts at risk, Dec. 31..... \$	45,825,935	103,290,932	261,475,229	463,769,034	656,260,900
22	Premium income for each year. \$	1,852,974	3,094,689	8,417,702	15,189,854	22,364,456
23	Net amount of policies become claims during each year..... \$	—	—	—	7,182,358	8,881,776
Provincial Life Insurance—						
24	Amounts at risk, Dec. 31..... \$	—	—	—	—	—
25	Premium income for year..... \$	—	—	—	—	—
26	Net amount of premiums become claims during each year \$	—	—	—	—	—
Business Transacted—						
27	Bank clearings..... \$'000	—	—	580,644	1,871,062	3,950,701
28	Bank debits..... “	—	—	—	—	—
29	Commercial Failures..... No.	—	—	1,861	1,341	1,184
30	Assets..... \$	—	—	—	7,686,823	6,499,052
31	Liabilities..... \$	—	—	16,723,939	10,811,671	9,085,773
Education (Provincially-Controlled Schools only)—						
32	Enrolment..... No.	803,000	891,000	993,000	1,092,633	1,173,009
33	Averages of daily attendance... “	—	—	—	669,000	743,299
34	Teachers.....	13,559	18,016	23,718	27,126	32,250
35	Public expenditures on..... \$	—	—	—	11,044,925	16,368,244
Criminal Statistics—⁹						
36	Convictions, criminal offences.. No.	—	7,378	8,600	9,974	14,363
37	Convictions, minor offences.... “	—	21,847	29,017	32,174	56,540
Hospitals—						
38	Other than mental..... No.	—	—	—	—	—
39	Patients under treatment during year..... “	—	—	—	—	—
40	Bed capacity..... “	—	—	—	—	—
41	Mental..... “	—	—	—	—	—
42	Patients under treatment during year..... “	—	—	—	—	—
43	Receipts..... \$	—	—	—	—	—
44	Expenditures..... \$	—	—	—	—	—

¹ The figures for 1937 are subject to revision. ² Including amounts deposited elsewhere than in Canada from 1901. ³ Included in Post Office savings banks. ⁴ Including Building Societies and Trust Companies (1871-1911). ⁵ Revised since the publication of the 1937 Year Book. ⁶ Figures do not include fraternal insurance. ⁷ These figures are for 1924, the first year for which bank debits are available. ⁸ Includes Newfoundland. ⁹ Year ended Sept. 30.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—concluded.

1911.	1916.	1921.	1926.	1931.	1935.	1936.	1937. ¹	
103,009,256	113,175,353	129,096,339	116,638,254	144,674,853	145,500,000	145,500,000	145,500,000	1
1,303,131,260	1,839,286,709	2,841,782,079	2,864,019,213	3,066,018,472	2,956,577,704	3,144,506,755	3,317,087,132	2
1,037,661,393	1,596,905,337	2,556,454,190	2,604,601,786	2,741,554,219	2,667,950,352	2,855,622,232	3,025,721,653	3
304,801,755	428,717,781	551,914,643	553,322,935	578,604,394	568,615,373	618,340,561	691,319,545	4
568,976,209	780,842,383	1,289,347,063	1,340,559,021	1,437,976,749	1,445,281,247	1,518,216,945	1,573,654,555	5
980,433,788	1,418,035,429	2,264,586,736	2,277,192,043	2,422,834,828	2,426,760,923	2,614,895,597	2,775,530,413	6
43,330,579	40,008,418	29,010,619	24,035,669	24,750,227	22,547,006	22,047,287	21,879,593	7
14,673,752	13,519,855	10,150,189	8,794,870	8,820,422	8,820,422	8,820,422	8,820,422	8
34,770,386	40,405,037	58,576,775	67,241,344	69,820,422	66,496,595	69,665,415	73,450,133	9
389,701,988	70,872,297	96,698,810	120,321,095	147,094,183 ⁶	137,994,145 ⁶	137,210,511	—	10
389,701,988	70,872,297	95,281,122	119,425,417 ⁸	146,046,087 ⁶	137,982,873 ⁶	137,199,814	—	11
33,742,513	8,987,720	15,868,926	21,316,150	30,823,662	26,556,302	26,250,954	—	12
—	7,794,712	10,237,930	13,195,277	15,459,347	15,970,893	16,374,558	—	13
—	47,162,220	87,802,281	157,756,647	241,416,690	277,351,701	261,481,061	—	14
2,279,868,346	3,720,058,236	6,020,513,832	8,051,444,136	9,544,641,293	8,782,698,099	9,248,273,260	9,773,599,893	15
20,575,255	27,783,852	47,312,564	52,595,923	50,342,669	40,884,876	40,218,296	42,475,604	16
10,936,948	15,114,063	27,572,560	25,705,975	29,938,409	14,821,465	14,072,237	14,811,055	17
—	849,915,678	1,269,764,435	1,286,255,476	1,341,184,333	1,644,023,953	1,184,852,046	—	18
—	3,902,504	5,545,549	6,068,701	7,185,066	5,250,038	5,002,603	—	19
—	2,188,438	3,544,820	3,062,846	4,985,605	2,413,000	2,190,624	—	20
950,220,771	1,422,179,632	2,934,843,848	4,610,196,334	6,622,267,793	6,259,158,404	6,403,037,477	6,542,786,202	21
31,619,626	48,093,105	98,864,371	159,872,965	225,100,571	200,157,567	200,541,265	199,093,260	22
11,434,901	20,259,534	24,014,465	34,642,526	54,410,589	53,798,438	58,086,634	60,379,142	23
—	348,097,229	222,871,178	147,821,972	202,094,301	162,437,144	130,044,228	—	24
—	5,311,003	4,389,008	3,991,126	5,178,615	4,140,599	3,025,124	—	25
—	4,592,420	2,812,077	1,741,735	2,603,453	2,938,097	2,195,537	—	26
7,346,382	10,315,854	16,811,287	17,715,090	16,827,603	16,927,486	19,202,527	18,850,385	27
—	—	27,157,474 ⁷	30,358,034	31,586,468	31,546,066	35,928,607	35,166,061	28
1,332	1,685 ⁸	2,451 ⁸	2,196 ⁸	2,563 ⁸	1,367	1,238	952	29
9,964,404	19,670,542 ⁸	57,158,397 ⁸	25,668,509 ⁸	37,613,810 ⁸	9,014,000	7,060,000	4,813,000	30
13,491,196	25,069,534 ⁸	73,299,111 ⁸	37,082,882 ⁸	52,987,554 ⁸	13,094,000	11,314,000	7,426,000	31
1,361,205	1,626,144	1,880,805	2,085,473	2,264,106	2,195,823	—	—	32
870,532	1,118,522	1,349,256	1,564,830	1,801,955	1,857,256	—	—	33
40,516	50,307	56,607	63,840	71,246	73,921	—	—	34
37,971,374	57,362,734	112,976,543	122,701,259	144,748,823	111,569,326	—	—	35
19,547	23,282	24,946	27,036	44,064	43,759	45,594	—	36
93,713	100,509	152,227	169,171	323,024	360,093	375,381	—	37
—	—	—	—	822	906	903	—	38
—	—	—	—	688,456	815,568	877,945	—	39
—	—	—	—	55,285	65,802	66,486	—	40
—	—	—	—	56	56	57	—	41
—	—	—	—	40,485	50,734	53,326	—	42
—	—	—	—	—	10,940,797	14,300,952	—	43
—	—	—	—	—	10,938,882	14,222,138	—	44

NOTE.

In the foregoing Summary, the statistics of fisheries (1871-1916), trade, shipping, the Post Office, the public debt, revenue and expenditure and the Post Office and Government savings banks relate to the fiscal years ended June 30 up to 1906; subsequently to years ended Mar. 31. Agricultural, dairying, fisheries (from 1922), mineral, manufacturing, banking, insurance, loan and trust companies, construction, road transportation, vital, hospital, and immigration statistics relate to the calendar years and railway statistics to the years ended June 30, 1871-1916, and to the calendar years 1921 and 1926-37. Canal statistics are those of the navigation seasons. The telegraph statistics relate to the fiscal years for Government lines and to the calendar years for other lines.

CHAPTER I.—PHYSIOGRAPHY.

PART I.—GEOGRAPHICAL FEATURES.*

Situation.—The Dominion of Canada comprises the whole northern part of the North American continent with its islands, except the United States territory of Alaska and the territory of Newfoundland (which includes Labrador). It takes in the whole Arctic archipelago between Davis strait and the connecting waters northward to the 60th meridian on the east and the 141st meridian on the west.

The Dominion is bounded on the west by the Pacific ocean and Alaska; on the south by the United States; on the east by the Atlantic ocean, the waters between Newfoundland and the Gulf of the St. Lawrence, Labrador, Davis strait, and the dividing waters between the Danish territory of Greenland and Ellesmere island; northward it extends to the North Pole.

The southernmost point is Middle island in lake Erie, in north latitude $41^{\circ}41'$, and from east to west Canada extends from about west longitude 57° at Belle Isle strait to west longitude 141° , the boundary of Alaska. Canadian territory thus extends over 84° of longitude and 48° of latitude.

Area.—The area of the Dominion is 3,694,863 square miles, a figure which may be compared with that of 3,738,395 square miles for the United States and its dependent territories, 3,776,700 the total area of Europe, 2,974,581 the total area of Australia, 3,275,510 the area of Brazil, 1,805,252 the area of India, 121,633 the area of the British Isles. Canada's area is over 27 p.c. of the total area of the British Empire as it is shown on page 165 of the 1934-35 Year Book.

Political Subdivisions.—Canada is divided from east to west into the following provinces: the Maritime Provinces of Nova Scotia, Prince Edward Island, and New Brunswick, all three comparatively small in area; Quebec, covering a strip south of the St. Lawrence river and the whole territory north of the St. Lawrence river and east of the Ottawa river to Hudson strait, except the coast of Labrador; Ontario, extending northward from the Great Lakes to Hudson bay; Manitoba, Saskatchewan, and Alberta, the provinces of the interior continental plain, extending from the boundary of the United States to 60° north latitude; and British Columbia, the province of the Cordilleran region, also extending from the International Boundary to 60° N. North of the area included in the provinces the country is divided into the Yukon Territory to the west, abutting on Alaska, and the Northwest Territories. The latter is subdivided into three provisional districts: that of Mackenzie comprises the mainland between Yukon and the meridian of longitude 102° W.; the district of Keewatin comprises in general the remainder of the mainland between the district of Mackenzie and Hudson bay, and includes the off-shore islands in Hudson and James bays; the district of Franklin comprises in general the Arctic archipelago.

Prince Edward Island.—This, the smallest province of the Dominion, lies just off the coast east of New Brunswick and north of Nova Scotia from both of which it is separated by Northumberland strait from ten to twenty-five miles wide. It is about 120 miles in length and, with an average width of 20 miles, covers an area of 2,184 square miles, approximately 200 square miles more than the State of Delaware. The island is almost trisected by the deep indentations of Malpeque bay north of Summerside and by the mouth of the Hillsborough river at Charlottetown, which nearly meets Tracadie bay on the north side. Its rich, red soil and red sandstone formations are distinctive features, and no point on the island attains a greater

*Revised by F. H. Peters, Surveyor General and Chief, Hydrographic Service, Department of Mines and Resources, Ottawa.

altitude than about 450 feet above sea-level. Its climate, tempered by the surrounding waters of the gulf and yet free from the rigours of Atlantic storms, combined with a fertile soil and sheltered harbours, offers great inducements to the pursuits of agriculture and fishing. The province is noted for its relative predominance in the fox-farming industry, its lobster canneries, its oyster beds, and its production of seed potatoes.

Nova Scotia.—The province of Nova Scotia is 381 miles in length by from 50 to 105 miles in width, a long, narrow strip of land lying parallel to the Maine and New Brunswick coasts and joined to the latter province by the isthmus of Chignecto, which is 15 miles in width. It includes to the north the island of Cape Breton, which is separated from the mainland by the narrow strait of Canso. The total area of the province is 21,068 square miles, a little over 2,000 square miles less than the combined areas of Belgium and Holland. Cape Breton island, south of the main entrance to the gulf of St. Lawrence and sheltering Prince Edward island from the Atlantic, is roughly 100 miles in length with an extreme breadth of 87 miles. Its area of 3,970 square miles encloses the salt-water lakes of Bras d'Or, connected with the sea at the north by two natural channels and at the south by the St. Peters ship canal. The ridge of low mountainous country running through the centre of the Nova Scotia mainland, the highest altitude of which is less than 1,500 feet, divides it roughly into two slopes. That facing the Atlantic is generally rocky and open to the sweep of Atlantic storms, but the other, facing the bay of Fundy and Northumberland strait, consists for the most part of fertile plains and river valleys noted for general farming and for fruit-farming districts which produce the famous Nova Scotian apples. The Atlantic coast is deeply indented with numerous excellent harbours, many of which provided splendid homes and refuges for the old sail fishing fleets. The province is still the home of an extensive fishing industry. The mineral resources of Nova Scotia were among the first in the Dominion to be exploited as some of its coal deposits outcropped on the sea-coast. These valuable coal measures make Nova Scotia still one of the chief coal-producing provinces of the Dominion. In addition, there are extensive areas of gold-bearing formations and valuable deposits of gypsum.

New Brunswick.—With a total area of 27,985 square miles, New Brunswick may be compared in size to Scotland with its area of 30,405 square miles. The province is very compact and in shape nearly rectangular, with its depth not greatly exceeding its width. The conformation is in general undulating and of low relief. In the southeastern half of the province the ground elevation does not generally exceed 500 feet above sea-level except for a narrow strip in the south which produces the highlands bordering the bay of Fundy east of Saint John. In the northwestern half the ground elevation is in general from 500 to 1,000 feet above sea-level and reaches its greatest elevation of about 2,690 feet in Northumberland county north-east of Grand Falls. The St. John, rising in the sister province of Quebec and the bordering State of Maine, is a river with many distinctive beauties, while its length of nearly 400 miles makes it quite noteworthy as to size. In the northeastern half of the province there are very extensive areas of Crown lands still carrying valuable stands of merchantable timber. The bay of Chaleur at the north, the gulf of St. Lawrence and Northumberland strait at the east, the bay of Fundy at the south, and Passamaquoddy bay at the southwest, provide the province with a very extensive sea-coast. To its southwest is a group of islands belonging to the province, the most important of which are Grand Manan, Campobello, and the West Isles. New Brunswick has been called the best watered country in the world; numerous rivers

provide access to extensive lumbering areas in its interior and to many of the most attractive hunting and fishing resorts in the Dominion. While its forest resources are an important economic feature, extensive areas of rich agricultural lands are found in the river valleys and the broad plains near the coasts. The Minto coal-fields, though producing on a limited scale for many years, have shown an expanding tendency recently and the province also produces a limited quantity of petroleum and natural gas.

Quebec.—Quebec might well be included among the Maritime Provinces, for with the St. Lawrence river, the gulf of St. Lawrence, the Atlantic, Hudson strait and bay, salt water washes the coasts of the province for a length of over 2,700 miles. Besides including a narrow strip of land between the St. Lawrence and the International and New Brunswick boundaries, Quebec extends northward from the St. Lawrence and Ottawa rivers to Labrador and Hudson strait, covering over 17° of latitude and an area of 594,534 square miles, about 38 p.c. of which lies south of the isotherm of 60° F. mean July temperature.* The combined areas of France, Germany, and Spain are about 2,600 square miles less than the area of Quebec. The conformity of the surface of Quebec is in general that characteristic of the Precambrian rocks, being quite even in general but much diversified by minor hills and hollows. North of the St. Lawrence the land takes the form of a ridge, parallel to the river and rising from sea-level to the Height of Land at an elevation of from 1,000 to 3,000 feet and then descending gently again to the sea-level of Hudson bay to the northwest; but to the northeast the ridge carries its height to end abruptly in the high headlands of Labrador. South of the river, the area is comprised of the St. Lawrence Lowlands between Montreal and Quebec which, rising to the east, produce the highest known elevation in the province, *viz.*, 4,160 feet, that of Jacques Cartier peak of Tabletop mountain in the Gaspé peninsula. With the exception of the treeless zone extending somewhat south of Ungava bay, most of the province supports a valuable tree growth varying from the mixed forest in the southwest to the eastern and northern coniferous in the areas of higher latitude. Apart from its importance as the threshold of Canada and the Atlantic gateway through which ocean vessels must pass on their way to the interior of the continent, Quebec is also noted for its natural resources. The extensive timber limits of its northern areas form the basis for the great pulp and paper industry of the present and the future. Its rivers, many of them as yet comparatively unknown, may be harnessed to supply about two-fifths of the electric power available in Canada. Its asbestos deposits have long been known for their quality and extent, while more recently there have been extensive developments of deposits of gold and copper in the northwestern part of the province, with further discoveries extending the mineralized area into the Chibougamau district. These developments have brought the province up to third place in mineral production in Canada. The fisheries of the St. Lawrence river and gulf are well known. Agriculturally, the climate and soil of the upper St. Lawrence River valley and the plains of the Eastern Townships are eminently adapted to general farming operations.

Ontario.—The province of Ontario is the section of the Dominion contained between the great international lakes and Hudson bay and between the western boundary of Quebec and the eastern limits of Manitoba. Although generally regarded as an inland province, Ontario has a fresh-water shore line on the Great Lakes of more than 2,362 miles and on the north a salt-water shore line of about 680 miles with a tidal port at Moosonee at the southern end of James bay. The

* The isotherm of 60° F. mean July temperature is generally considered as the northern limit for the economic production of cereals.

southernmost point of Ontario, which is also the southernmost point of the Dominion, is in north latitude $41^{\circ} 41'$ —a little further south than the northern boundary of the State of California—and its most northern, in north latitude $56^{\circ} 50'$. The total area comprised within its limits, of which about 82 p.c. lies south of the isotherm of 60° F. mean July temperature,* is 412,582 square miles, of which its fresh-water area of 49,300 square miles forms the unusually large proportion of 12 p.c. The province is over 17,000 square miles greater in area than are France and Germany together, and when compared with the States to the south, Ontario is found to be almost equal in extent to the combined areas of the six New England States, together with New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Michigan, and Wisconsin. Excepting in the southwestern part, the surface conformity of Ontario is influenced by the characteristics of the Precambrian rocks. In northern Ontario a large area with elevations of 1,000 feet or over adjoins the north shore of the Great Lakes and going north a short distance over the Height of Land the slope descends very gently to Hudson bay, which has a wide marginal strip less than 500 feet above sea-level. The highest point in Ontario is 2,120 feet, on the promontory at the northeastern corner of lake Superior. The whole province supports a valuable covering of trees, varying, from south to north, from the mixed forest to the eastern and northern coniferous. Many varieties of climate and soil are encountered, from the distinctively southern conditions found along the shores of lake Erie to the very different ones of Hudson and James bays. Ontario, of all the provinces, is the centre of the country's manufacturing industries, owing to its abundant water-power resources and its proximity to the coalfields of Pennsylvania, but the many resources of its rural districts are not on this account neglected. Mining is a very important industry in the wide-spread Precambrian area and, although the most important districts are Sudbury, Porcupine, and Kirkland Lake, profitable mining operations, principally of gold, are now being carried on from the Manitoba boundary eastward across northern Ontario and down into eastern Ontario. There is also an important production of petroleum and natural gas, salt, and gypsum in the southwestern part of the province. Fruit farming in the Niagara district and general farming throughout the entire southern part of the province are carried on extensively under unusually favourable conditions, while timber, pulp, and furs are other important products of more northern parts.

Manitoba.—Manitoba, the most easterly of the Prairie Provinces, and also the oldest of them in point of settlement, includes the area between Ontario on the east and Saskatchewan on the west. Its southerly limit is the International Boundary, while its northerly boundary is the 60th parallel of latitude and Hudson bay, where its coast of over 400 miles includes the harbour and port of Churchill. The total area of Manitoba, of which about 56 p.c. lies south of the isotherm of 60° F. mean July temperature,* is 246,512 square miles—3,246 square miles greater than twice the total area of the British Isles. The conformity of the surface of Manitoba is quite even; commencing on the north with a strip bordering on Hudson bay—perhaps 100 miles wide and less than 500 feet in elevation—the surface rises gradually towards the west and south. The bulk of the province has an elevation of between 500 and 1,000 feet, and the greatest height of 2,727 feet is attained in Duck mountain, northwest of lake Dauphin. East and north of lake Winnipeg the Canadian Shield is found with its Precambrian rock formation, but the remainder of the province is overlain by very fertile soil of great depth. The treeless prairie belt extends into the southwest corner of the province, but the greater portion of the developed area is in the grove belt, characterized by groves of poplar interspersed with open prairie

* See footnote, p. 3.

patches; to the north there are great areas of northern mixed forest, blending into the northern coniferous, which thin again to some treeless areas along the coast-line farther north. The province has been regarded as typically agricultural, its southern lands being specially adapted to this form of industry. Its northern districts, however, are of importance in the production of timber and furs and its numerous large lakes in the production of fresh-water fish, chiefly whitefish. About three-fifths of the area of this province is underlain by the Precambrian rocks which have been found so rich in minerals in northern Ontario and Quebec. Two large deposits of copper-gold-zinc ore have been developed, south of the Churchill river near the Manitoba-Saskatchewan boundary, while to the east and north of lake Winnipeg recent years have witnessed great activity in the prospecting and development of gold properties, a number of which are now producing. The province also possesses important water-power resources in the rivers of the Precambrian area.

Saskatchewan.—This central prairie province lies between Manitoba and Alberta; it extends from the International Boundary on the south to the 60th parallel of latitude, which divides it from the Northwest Territories. The area, of which about 89 p.c. lies south of the isotherm of 60° F. mean July temperature,* is 251,700 square miles, approximating that of Manitoba, and greater by 5,000 square miles than the combined areas of the British Isles and Norway. Approximately one-third of the total area, generally lying north of the Churchill river, is underlain by the Precambrian rocks which have been found so richly mineralized in other parts of Canada. The Flinflon copper-gold-zinc deposit on the Manitoba-Saskatchewan boundary is an evidence of economic mineralization in the east, while in the Lake Athabaska region of the northwest promising discoveries of gold have been made recently. The northern districts, abundantly watered by lakes and rivers, in addition to potential mineral wealth, are rich in timber resources while the southerly two-thirds of the province overlain by generally fertile soil of great depth includes a large portion of the famous western wheat fields. The larger part of the developed area in the south is comprised in the great treeless prairie belt, fringed to the north with a zone of poplar interspersed with open prairie, which gradually changes into the northern mixed forest covering all the northerly parts. Apart from the southern prairies, which are extraordinarily smooth, the surface topography is generally of low relief with a gradually rising slope towards the west. The bulk of the province has a general elevation of between 1,000 and 2,000 feet, with the maximum elevation of about 4,500 feet on the eastern point of the Cypress hills in the southwest corner. The climate in the southern parts is quite different from that of Eastern Canada, with less precipitation and perhaps more severe features than are encountered in many other parts of the country, but is nevertheless most favourable to plant growth, when sufficient moisture is available.

Alberta.—Lying between Saskatchewan on the east and the Rocky mountains and the 120th meridian on the west, and bounded on the north and south by the Northwest Territories and the United States, respectively, is the province of Alberta. Its area is slightly greater than that of Saskatchewan or Manitoba, comprising a total of 255,285 square miles, of which about 90 p.c. lies south of the isotherm of 60° F. mean July temperature.* The area of the province is over 8,600 square miles greater than the combined areas of the British Isles and Norway. Like Saskatchewan, the southern part of the province is comprised in the dry, treeless prairie belt, changing to the north into a zone of poplar interspersed with open prairie, which again gives way to the northern mixed forest covering the northerly parts. The

* See footnote, p. 3.

Precambrian rocks just touch Alberta at its northeast corner, so that, excepting the fringe of mountainous country on its western border, practically the whole of the province is overlain by arable soil of great depth. Alberta has two marked features: (1) the great valley of the Peace river, which has already resulted in the extension of settlement farther north than in any other part of Canada, and (2) the wonderful grazing lands in the foothills district, which, rising sharply on the west, commence the ascent which continues to the very peaks of the Rocky mountains. The southern half of the province, rising towards the west, lies at a general elevation of from 2,000 to 4,000 feet; but in the northern half the slope descends until elevations of well under 1,000 feet are reached at lake Athabaska in the northeast corner. Mount Columbia, with an elevation of 12,294 feet, is the highest point in the province. Alberta has the most extensive coal resources of any province of the Dominion and has also become the leading producer of petroleum and natural gas. Lumbering is important in the more mountainous western parts and in the north, while ranching is still pursued in the less populous sections. In the southern prairies there are considerable areas where the quantity and distribution of the natural precipitation makes permanent agriculture precarious and in these areas a number of large irrigation projects have been developed, taking their water supply from rivers rising in the mountains which form the western boundary of the province. The climate in Alberta is a particularly pleasant one, cooler in summer than more eastern parts of the country and tempered in winter by the "Chinook" winds.

British Columbia.—British Columbia, the most westerly province of the Dominion, comprises an area of 366,255 square miles, slightly more than three times the area of the British Isles. The predominant feature of the province is the parallel ranges of mountains which cover all of it except the northeast corner and produce a conformation characterized by high mountain ranges interspaced with valleys, many of which are extremely fertile, with climatic conditions well adapted to mixed agriculture or fruit growing. Apart from the smoother area in the northeast corner which extends up from the "Peace River Block" there is another notably large area of smoother terrain in the Stuart Lake district, traversed by the Canadian National railway running west from Fort George to Prince Rupert. The highest point in the province is mount Fairweather (15,287 feet). The shore line of the Pacific is deeply indented with many inlets ideal for harbourage and with wonderful scenic aspects. With two ocean ports served by transcontinental railways, British Columbia is well situated and equipped to carry on trade with the Orient, while its great stands of fir, spruce, and cedar timber constitute a natural resource of great value. The province includes many islands of the Pacific, notably the Queen Charlotte group and Vancouver island; the latter, with an area of about 12,408 square miles, is noted for its temperate climate and abundant natural resources. The wealth of the forest resources supports the lumbering and pulp and paper industries and puts British Columbia ahead of any other province in the production of lumber and timber. The province also excels in fishery products, chiefly on account of its catches of the famous Pacific salmon. The mineral resources are remarkable for their variety and wealth. The production of the metals, gold, copper, silver, lead, and zinc, has played an important role in the economic life of the province since its early days, while valuable coal deposits on Vancouver island, and at Crow's Nest and Fernie in the interior, have been worked for many years. The boundaries of the province extend from Alberta on the east to the Pacific ocean and Alaska on the west, and from the International Boundary northward to Yukon.

Yukon and Northwest Territories.—The vast area of 1,516,758 square miles is included within the boundaries of Canada's northern subdivisions, the Yukon Territory and the three provisional districts of the Northwest Territories. This is over twelve times the area of the British Isles, nearly half the area of the United States, and more than the combined areas of the Argentine Republic and Chile in South America. The northern territories are as yet, in parts, unexplored, but travel and transport by air is having a great influence in their further exploration and development. By means of aeroplane photography, the mapping of areas adjacent to the chief transportation routes and mineral discoveries is being rapidly extended. There are many widely scattered indications of mineral wealth in these territories. The discovery of alluvial gold in the Yukon was the cause of the first opening up of that territory, which of late years has been producing coal for local requirements and exporting silver and lead, as well as gold. The presence of copper deposits in the Coppermine River area has been known for many years and recent exploration substantiates their probable eventual worth. More recently, at the east end of Great Bear lake, rich deposits of silver-radium ore have been discovered and are now being mined. Oil wells which have been drilled at Norman on the Mackenzie river are providing a source of power for the mining and transportation activities, as well as a convenient fuel for the increasing number of residents in the district. Promising gold prospects have been located in the Great Slave Lake area. Because a large portion lies within the Arctic circle, the tendency has been to associate with the Northwest Territories thoughts of ice and snow but as our knowledge is increased the argument steadily gains more weight that what have been regarded in the past as the great "barren lands" of the northern mainland, are more appropriately described as our great northern prairies.

Development of the resources of, and communications in, the Northwest Territories and Yukon are dealt with in Chapter XXVIII, Subsection 1 of Section 1.

Summary of Land and Water Area.—The total land and fresh-water areas of the Dominion, together with its distribution by provinces and territories, are shown in Table 1.

1.—Land and Fresh-Water Areas of Canada, by Provinces and Territories, 1937.¹

Province or Territory.	Land. ²	Fresh Water. ²	Total. ²	Per Cent of Total Area.
	sq. miles.	sq. miles.	sq. miles.	
Prince Edward Island.....	2,184	—	2,184	0.1
Nova Scotia.....	20,743	825	21,068	0.6
New Brunswick.....	27,473	512	27,985	0.8
Quebec.....	523,534	71,000	594,534	16.1
Ontario.....	363,282	49,300	412,582	11.1
Manitoba.....	219,723	26,789	246,512	6.7
Saskatchewan.....	237,975	13,725	251,700	6.8
Alberta.....	248,800	6,485	255,285	6.9
British Columbia.....	359,279	6,976	366,255	9.9
Yukon.....	205,346	1,730	207,076	5.6
Northwest Territories—				
Franklin.....	546,532	7,500	554,032	15.0
Keewatin.....	218,460	9,700	228,160	6.2
Mackenzie.....	493,225	34,265	527,490	14.2
Canada.....	3,466,556	228,307	3,694,863	100.0

¹ The salt-water areas of Canada are excluded.

² Approximate.

Section 1.—Orography.

The outstanding and predominant orographical feature in Canada is the great Cordilleran mountain system which, extending up from the south, parallels the coast of the Pacific ocean, and, continuing on, comprises the bulk of the United States territory of Alaska. Throughout Canada this mountain system has a width of about four hundred miles and, covering about 530,000 square miles in area, includes nearly all of British Columbia and Yukon. This region is definitely the most rugged and elevated in the Dominion, many of the summits reaching heights of 10,000 feet with occasional peaks over 13,000 feet above sea-level. The principal named peaks exceeding 11,000 feet in elevation are given in Table 2. The main mountain ranges forming the system are the Coast mountains and the St. Elias mountains on the Pacific side, the Selkirks and the Rockies on the east side of the system to the south, and further north on the east side the Stikine and the Mackenzie mountains. This great mountainous tract is a formidable barrier between the ocean and the interior of Western Canada; by precipitating a great part of the moisture out of the winds coming from the Pacific, it has a marked effect on the climate of the western country. On the west side, the Cordilleras are drained by mountain streams pitching swiftly down to the Pacific. The Yukon territory is drained to the north by that remarkable river of the same name which runs through a wide valley over 1,700 miles long before reaching the Bering sea. On the east side of the mountains and their foothills, the land slopes gently away to the east and to the north.

2.—Mountain Peaks over 11,000 Feet in Elevation, with Latitude and Longitude.

NOTE.—The highest mountain in Eastern Canada, with the exception of the Torngats in Labrador, peaks of which rise to about 5,500 feet, is Tabletop mountain (recently re-named Mount Jacques Cartier by the Geographic Board of Canada) in N. lat. 48°59', W. long. 65°56', Gaspé district, Quebec, the summit of which is 4,160 feet above sea-level.

Province and Mountain Peak.	Elevation.	N. Lat.		W. Long.		Range.
	ft.	°	'	°	'	
Alberta—						
Alberta.....	11,874	52	14	117	36	Rocky mts.
Alexandra ¹	11,214	51	59	117	12	"
Assiniboine ¹	11,870	50	56	115	42	"
Athabaska.....	11,452	52	07	117	11	"
Coleman.....	11,000	52	06	116	55	"
Columbia ¹	12,294	52	09	117	27	"
Deltaform ¹	11,235	51	18	116	15	"
Diadem.....	11,060	52	19	117	00	"
Forbes.....	11,902	51	48	116	56	"
Fryatt.....	11,026	52	33	117	54	"
Hector.....	11,135	51	34	116	15	"
Hungabee ¹	11,457	51	20	116	17	"
Joffre ¹	11,316	50	32	115	12	"
King Edward ¹	11,400	52	10	117	30	"
Kitchener.....	11,500	52	13	117	19	"
Lyell ¹	11,495	51	58	117	06	"
Lefroy ¹	11,230	51	22	116	17	"
Lunette ¹	11,150	50	52	115	39	"
Sir Douglas ¹	11,174	50	43	115	20	"
Snow Dome ¹	11,340	52	11	117	19	"
Stutfield.....	11,320	52	15	117	29	"
Temple.....	11,636	51	21	116	15	"
The Twins.....	11,675 12,085	52	13	117	12	"
Victoria ¹	11,365					
Wilson.....	11,000	51	58	116	45	"
Woolley.....	11,170	52	18	117	25	"

¹ This peak is on the interprovincial boundary between Alberta and British Columbia.

2.—Mountain Peaks over 11,000 Feet in Elevation, with Latitude and Longitude—con.

Province and Mountain Peak.	Elevation.	N. Lat.	W. Long.	Range.
	ft.	° ' "	° ' "	
British Columbia—				
Bush.....	11,000	54 00	120 15	Rocky mts.
Bryce.....	11,507	52 03	117 20	"
Clemenceau.....	12,001	3	3	"
Chown.....	11,500	53 26	119 26	"
Delphine.....	11,076	50 28	116 25	Selkirk mts.
Fairweather ¹	15,287	58 54	137 31	St. Elias mts.
Farnham.....	11,342	50 29	116 27	Selkirk mts.
Goodsir.....	11,676	51 12	116 24	Rocky mts.
Hasler.....	11,113	51 09	117 25	Selkirk mts.
Huber.....	11,051	51 22	116 18	"
Jumbo.....	11,217	50 24	116 32	Rocky mts.
King George.....	11,226	50 36	115 24	"
Resplendent.....	11,240	53 05	119 07	"
Robson.....	12,972	53 07	119 08	"
Root ¹	12,860	58 59	137 30	St. Elias mts.
Selwyn.....	11,013	51 09	117 24	Selkirk mts.
Sir Alexander.....	11,000	54 00	120 15	Rocky mts.
Sir Sandford.....	11,590	51 39	117 52	Selkirk mts.
The Helmet.....	11,160	51 11	116 20	Rocky mts.
Waddington.....	13,260	51 23	125 16	Coast mts.
Whitehorn.....	11,101	53 08	119 16	Rocky mts.
Yukon—2				
Alverstone.....	14,500	60 21	139 02	St. Elias mts.
Augusta.....	14,070	60 18	140 28	"
Baird.....	11,375	60 19	140 31	"
Badham.....	12,625	60 38	139 47	"
Cook.....	13,760	60 10	139 59	"
Craig.....	13,250	3	3	"
Hubbard.....	14,950	61 16	140 53	"
Jeannette.....	11,700	60 20	140 43	"
King.....	17,130	60 35	140 39	"
Logan.....	19,850	60 35	140 21	"
Lucania.....	17,150	61 01	140 28	"
Malaspina.....	12,150	60 19	140 34	"
McArthur.....	14,400	60 36	140 13	"
Newton.....	13,811	60 19	140 52	"
St. Elias.....	18,008	60 18	140 57	"
Steele.....	16,439	61 06	140 19	"
Strickland.....	13,818	61 14	140 45	"
Vancouver.....	15,696	60 21	139 42	"
Walsh.....	14,498	61 00	140 00	"
Wood.....	15,885	61 14	140 31	"

¹ This peak is on the international boundary between British Columbia and Alaska. ² The enumerated peaks in Yukon are on or near the Yukon-Alaska boundary. ³ Data not available.

The southern portion of the eastern declivity, from the Rocky mountains down to lake Winnipeg, is comprised in the Nelson River drainage emptying into Hudson bay; representing the presently settled part of Western Canada, it includes the treeless prairies and comprises the lands which, in the main, produce Canada's great wheat crops. This area is characteristically different from other parts of Canada in that any exposure of surface rock is rare. Generally, it is overlain by great depths of clay soil, through which the streams have cut themselves down into deep coulees and the rivers into deep wide valleys. Lakes of any considerable extent are infrequent and usually quite shallow; in the dry prairie section there are many places where the evaporation from the broad and shallow bodies of water is so great that they have little or no outflowage and consequently the concentration of mineral salts in the water makes it unfit for domestic use. The terrain is generally smooth or gently undulating and, from an elevation of 3,400 feet at Calgary, falls away gradually to an elevation of 800 feet around lake Winnipeg seven hundred miles to

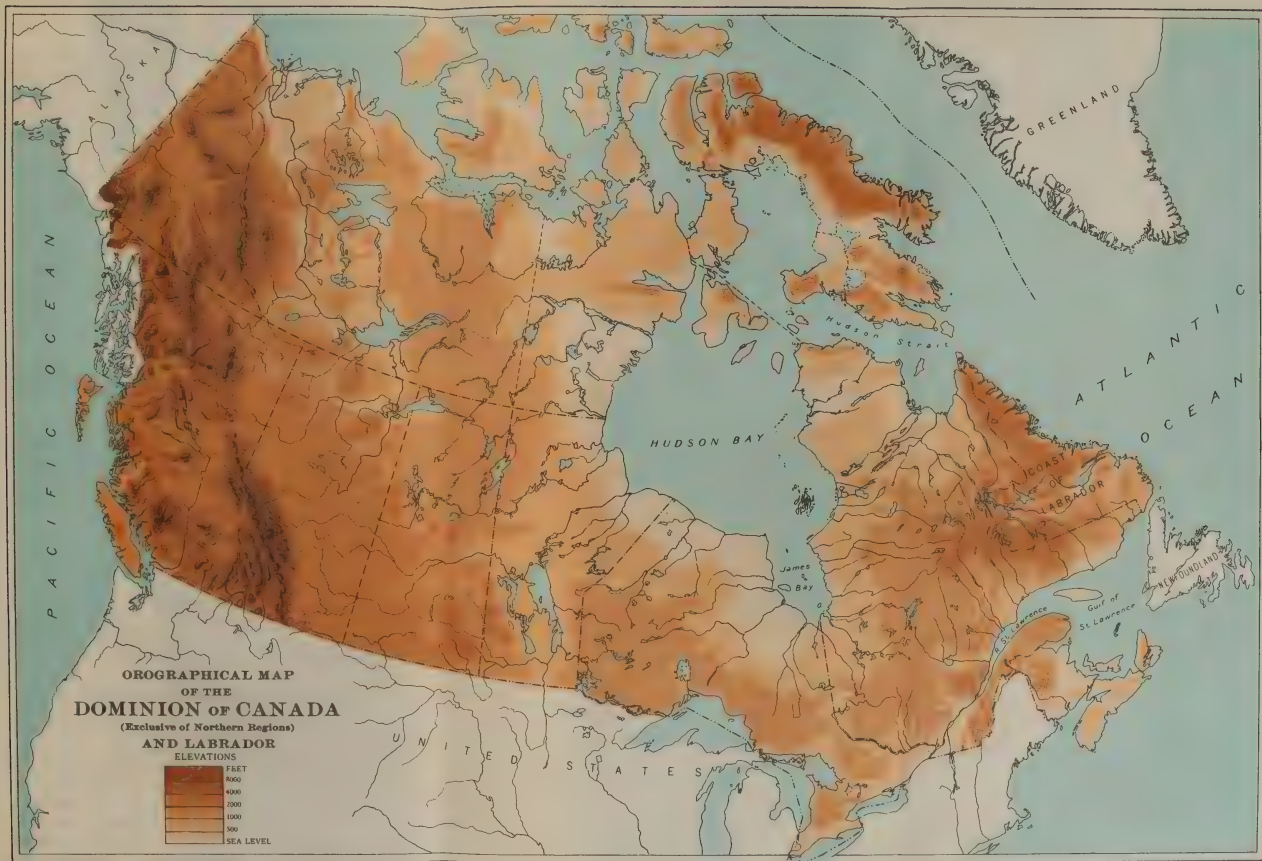
the east. Just north of Edmonton a height of land turns the waters to flow north into the great Mackenzie river, over 2,500 miles long, whose valley with its low elevation above the sea is the outstanding feature of the Northwest Territories. In this watershed the terrain becomes less smooth with prominent elevations in the Caribou, Horn, and Franklin mountains and the clay soils of the prairies give way to more of sand and gravel. Great Slave and Great Bear lakes, each half as large again as lake Ontario and less elevated above the sea than lake Erie, are notable features; north and east of these two great lakes the country comes within the Canadian Shield* and the rock with some shallow overburden slopes gently down to the Arctic ocean without any large uplifts to break the monotony.

Going east again, in the more northerly part there is encountered the orographical influence of Hudson bay which, indenting the continent so deeply and with rivers running in from west, south, and east, has an enormous drainage basin mainly in Manitoba, Ontario, and Quebec. Practically all of this great basin, excepting the Nelson River drainage, is included in the Canadian Shield, the surface characteristic of which is hard rock either exposed or overlain with shallow soil generally confining agriculture to the valleys or small basins. With only small areas in northeastern Quebec rising above 2,000 feet in elevation, there are no great eminences, but the surface is generally accidented by many hills and hollows with countless numbers of lakes and streams. On its west and south sides, Hudson bay is bordered by a strip of low land under 500 feet in elevation and varying in width from one to two hundred miles; in the southerly part of these flat, low lands the rock is overlain with a considerable depth of soil sometimes referred to as the clay belt of northern Ontario.

South and east of Hudson bay the predominating feature, both orographically and economically, is the very extensive depression containing the Great Lakes and the St. Lawrence river which connects them with the Atlantic ocean. The bulk of the drainage basin of the Great Lakes and the St. Lawrence lies within the limits of the Canadian Shield with the same characteristics as already described. The very important exception is the valley of the St. Lawrence river from Kingston to Quebec and the peninsula of Ontario formed by the Great Lakes which together are generally known as the St. Lawrence Lowlands, about 35,000 square miles in area. At present, containing the greater part of the population of Canada, this industrial area is of great economic importance; the climatic conditions and fertile soil combine to make it most suitable for mixed farming.

The Maritime Provinces, New Brunswick, Nova Scotia, and Prince Edward Island, together with the southeastern portion of Quebec, embrace an extension northward of the Appalachian mountains but, excepting the Notre Dame mountains of Gaspé peninsula, the comparatively low elevations are better described as hills. The whole area may be regarded as a peninsula jutting out with bold and broken coast-line to separate the gulf of St. Lawrence from the Atlantic and it is this situation that dominates the orography; with the exception of the St. John, the rivers are of no great length in their courses down to the sea. It is a beautiful country of diversified character with areas of good farm lands; the broken coast provides many good harbours and the only ocean ports open throughout the whole year that Canada possesses on the Atlantic seaboard.

* Excepting the St. Lawrence Lowlands, the Maritime Provinces, and the Hudson Bay Lowland, the Canadian Shield embraces all of Canada east of a line commencing at Darnley bay on the Arctic coast and running south and east through Great Bear lake, Great Slave lake, lake Athabaska, lake Winnipeg, and Lake of the Woods on the International Boundary.



ELEVATIONS OF RAILWAY STATIONS IN CITIES AND TOWNS WITH OVER 5,000 INHABITANTS (Census of 1931).*

Province.	Station.	Elevation Above Sea-Level.	Province.	Station.	Elevation Above Sea-Level.	
		feet.			feet.	
Prince Edward Island.....	Charlottetown (C.N.R.).....	0	Ontario—concluded.	Kenora (C.P.R.).....	1,090	
Nova Scotia.....	Amherst (C.N.R.).....	60		Kingston (C.P.R.).....	353	
	Dartmouth (C.N.R.).....	13		Kitchener.....	1,101	
	Glace Bay (S. and L. Ry.).....	74		Lindsay (C.P.R.).....	832	
	Halifax (new C.N.R.).....	24		London (C.P.R.).....	506	
	New Glasgow (C.N.R.).....	21		Midland.....	893	
	New Waterford Junction.....	103		Mimico.....	307	
	North Sydney (C.N.R.).....	41		Niagara Falls (C.N.R.).....	572	
	Springhill (C. Ry. and C. Co.).....	435		North Bay (C.P.R.).....	602	
	Stellarton (C.N.R.).....	62		Orillia (C.P.R.).....	725	
	Sydney (C.N.R.).....	7		Qahawa (C.P.R.).....	830	
	Sydney Mines (C.N.R.).....	62		Ottawa (Union).....	215	
	Treue Union.....	62		Owen Sound (C.P.R.).....	585	
	Yarmouth (C.N.R.).....	16		Pembroke (C.P.R.).....	381	
New Brunswick.....	Campbellton (C.N.R.).....	42		Peterborough (C.P.R.).....	622	
	Edmundston (C.P.R.).....	479		Port Arthur (C.P.R.).....	614	
	Fredericton (C.P.R.).....	33		Port Colborne (C.N.R.).....	583	
	Moncton (C.N.R.).....	50		Prenton.....	926	
	Saint John.....	21		Renfrew (C.P.R.).....	418	
Quebec.....	Cap de la Madeleine (C.P.R.).....	123		St. Catharines (C.N.R.).....	248	
	Chicoutimi (C.N.R.).....	21		St. Thomas (C.N.R.).....	766	
	Drummondville (C.P.R.).....	256		Sarnia (C.N.R.).....	612	
	Granby (C.N.R.).....	387		Sault Ste. Marie (C.P.R.).....	636	
	Grand Mère (C.P.R.).....	426		Simcoe (North).....	636	
	Hull (C.P.R.).....	167		Smiths Falls (C.P.R.).....	714	
	Joliette (C.P.R.).....	103		Stratford (C.N.R.).....	428	
	Jouquières (C.N.R.).....	487		Sudbury (C.P.R.).....	857	
	Lachine (C.N.R.).....	81		Thornhill (C.N.R.).....	365	
	La Tuque (C.N.R.).....	515		Timmins (T. and N.O. Ry.).....	1,029	
	Lévis (C.N.R.).....	16		Toronto (Union).....	273	
	Longueuil (C.N.R.).....	66		Trenton (C.P.R.).....	295	
	Magog (C.P.R.).....	639		Walkerville (C.P.R. and C.N.R.).....	597	
	Montreal (C.P.R.—Windsor).....	109		Waterloo (C.N.R.).....	1,058	
	Outremont (C.P.R.).....	206		Welland (C.N.R.).....	609	
	Quebec (C.P.R. and C.N.R.).....	21		Whitby (C.N.R.).....	298	
	Rimouski (C.N.R.).....	77		Windsor (M.C. Ry.).....	608	
	Rivière du Loup (C.N.R.).....	315		Woodstock (C.P.R.).....	948	
	St. Hyacinthe (C.P.R.).....	108	Manitoba.....	Brandon (C.P.R.).....	1,206	
	St. Jérôme (C.P.R.).....	303				1,262
	St. Lambert (C.N.R.).....	70		North Transcona (C.P.R.).....	768	
	Shawville (C.N.R.).....	209		Portage la Prairie (C.P.R.).....	853	
	Sherbrooke (C.P.R.).....	593		St. Boniface (C.P.R.).....	759	
	Sorel (C.N.R.).....	49		Winnipeg (C.P.R.).....	772	
	Therford Mines (O.C. Ry.).....	1,025	Saskatchewan.....	Moose Jaw (C.P.R.).....	1,778	
	Three Rivers (C.P.R.).....	62		North Battleford (C.N.R.).....	1,688	
	Valleyfield (C.N.R.).....	161		Prince Albert (C.P.R. and C.N.R.).....	1,414	
	Victoriaville (C.N.R.).....	423		Regina.....	1,896	
	Westmount (C.P.R.).....	152		Saskatoon (C.P.R.).....	1,599	
Ontario.....	Barrie (C.N.R.).....	726		Swift Current (C.P.R.).....	2,432	
	Belleville (C.P.R.).....	260		Weyburn (C.P.R.).....	1,857	
	Brampton (C.P.R.).....	721		Yorkton (C.P.R.).....	1,537	
	Brantford (C.N.R.).....	706	Alberta.....	Calgary (C.P.R.).....	3,439	
	Brockville (C.P.R. and C.N.R.).....	253		Edmonton (C.P.R.).....	2,153	
	Chatham (C.P.R.).....	594		(C.N.R.).....	2,186	
	Cobourg (C.P.R.).....	296		Lethbridge (C.P.R.).....	2,983	
	Collingwood (C.N.R.).....	589		Medicine Hat (C.P.R.).....	2,181	
	Corwall (C.P.R.).....	153	British Columbia.....	Kamloops (C.P.R.).....	1,160	
	Dundas (C.N.R.).....	613		Nanaimo (C.P.R.).....	129	
	Fort Frances (C.N.R.).....	1,122		Nelson (C.P.R.).....	1,768	
	Fort William (C.P.R.).....	617		New Westminster (C.P.R.).....	12	
	Galt (C.P.R.).....	658		North Vancouver.....	24	
	Guelph (C.P.R.).....	1,042		Prince Rupert (C.N.R.).....	19	
	Hamilton (King St.).....	305		Trail (C.P.R.).....	1,363	
	Hawkesbury (C.N.R.).....	163		Vancouver (C.P.R.).....	16	
	Ingersoll (C.P.R.) (South).....	880		Victoria (E. and N. Ry.).....	20	
	(North).....	890				

*Prepared under the direction of F. H. Peters, Surveyor General, and Chief, Hydrographic Service, Department of Mines and Resources, Ottawa, from information supplied by the Geodetic Service of Canada.

Section 2.—Lakes and Rivers.

The fresh-water area of Canada is unusually large constituting over 6 p.c. of the total area of the country. The outstanding feature is the Great Lakes, details concerning which are given in Table 3.

Particularly notable are the depth of lake Superior and the shallowness of lake St. Clair and lake Erie.

3.—Areas, Elevations, and Depths of the Great Lakes.

Lake.	Length.	Breadth.	Maximum Depth.	Area.	Elevation Above Sea-level.
	miles.	miles.	feet.	sq. miles.	feet.
Superior.....	383	160	1,302	31,820	602·23
Michigan.....	321	118	923	22,400	580·77
Huron.....	247	101	750	23,010	580·77
St. Clair.....	26	24	23	460	575·30
Erie.....	241	57	210	9,940	572·40
Ontario.....	193	53	774	7,540	245·88

Lake Superior, with an area of 31,820 square miles, is the largest body of fresh water in the world. As the International Boundary between Canada and the United States passes through the centre of lakes Superior, Huron, St. Clair, Erie, and Ontario, only a part of the areas of these lakes given in the above statement is Canadian, while the whole of lake Michigan is within United States territory. The total length of the St. Lawrence waterway, from the head of the St. Louis river in Minnesota to Pointe-des-Monts at the entrance of the gulf of St. Lawrence, is 1,900 miles. The great obstacle to navigation on this waterway was the rise of 326 feet between lakes Ontario and Erie, which is now surmounted by the new Welland canal; the river itself dropping over the escarpment at Niagara creates perhaps the most famous waterfall in the world. The Great Lakes, with the St. Lawrence river, form the most important system of waterways on the continent and one of the world's most notable fresh-water transportation routes. In addition to the Great Lakes there are many other remarkably large lakes; the eleven following, with their areas in square miles in parentheses, are all over 1,000 square miles in area: Great Bear (11,660), Great Slave (11,170), Winnipeg (9,398), Athabaska (3,058), Reindeer (2,444), Winnipegosis (2,086), Manitoba (1,817), Dubawnt (1,600), Nipigon (1,870), Southern Indian (1,200), Lake of the Woods (1,346). Apart from these lakes, named as notable for their size, there are innumerable other lakes scattered all over that major portion of the area of Canada lying within the Canadian Shield. In an area of 6,094 square miles, accurately mapped, just south and east of lake Winnipeg, there are 3,000 lakes; in an area of 5,294 square miles, accurately mapped, southwest of Reindeer lake in Saskatchewan, there are 7,500 lakes. Table 4 gives a list of the principal lakes of Canada, by provinces, with their elevations in feet and their areas in square miles.

4.—Areas and Elevations of Principal Canadian Lakes, by Provinces.

NOTE.—In the case of those reservoirs and lakes for which two elevations are given, HW means high water, LW low water, and N normal level.

Province and Lake.	Elevation.	Area.	Province and Lake.	Elevation.	Area.
	ft.	square miles.		ft.	square miles.
Nova Scotia—			Ontario—concluded.		
Bras d'Or.....	tidal	360	Manitou, Kenora.....	1,215	60
New Brunswick—			Mille Lacs, Lac des.....	1,491	102
Grand.....	tidal	65	Minnitaki.....	1,177	72
Quebec—			Nipigon.....	852	1,870
Abitibi (total, 350) part.....	868	55	Nipissing.....	643	330
Albanel.....	1,289	145	Ontario (total, 7,540) part.....	246	3,727
Baskatong (reservoir).....	HW 732 LW 677	109	Rainy (total, 366) part.....	1,107	292
Bienville.....	1	392	Red.....	1,157	69
Burnt (Lac Brulé).....	1,203	56	St. Clair (total, 460) part.....	575	270
Cabonga (reservoir) (Kakabonga).....	HW 1,185 LW 1,169	66	St. Francis, river St. Lawrence (total, 85) part.....	LW 151 N 153	20
Champlain (total, 360) part.....	95	18	St. Joseph.....	1,219	187
Chibougamau.....	1,253	138	Sandy.....	1,190	270
Clearwater.....	790	410	Seul (reservoir).....	HW 1,172 LW 1,156	416
d'Iberville.....	1	260	Shoal (total, 114) part.....	1,065	108
Evans.....	612	130	Simcoe.....	718	280
Goëland.....	660	125	Stout, Berens river.....	1,039	50
Indian House.....	1	125	Sturgeon, English river.....	1,342	110
Kaniapiskau.....	1,850	375	Superior (total, 31,820) part.....	602	11,200
Kempt.....	1,372	63	Timagami.....	962	90
Kipawa.....	884	95	Timiskaming (total, 110) part.....	HW 593 N 584	55
Lower Seal.....	860	130	Trout, English river.....	1,294	156
Manikuagan.....	1	110	Trout, Severn river.....	1	215
Manuan.....	1,340	100	Woods, Lake of the (total, 1,346) part.....	HW 1,062 LW 1,055	1,127
Maricourt.....	1	110	Manitoba—		
Mattagami.....	615	88	Athapapuskow.....	951	104
Minto.....	1	485	Atikameg.....	855	112
Mistassini.....	1,243	840	Beaverhill.....	651	70
Nichikun.....	1,760	150	Cedar.....	829	537
Olga.....	635	50	Cormorant.....	840	134
Payne.....	1	300	Cross, Nelson river.....	679	274
Pipmakan.....	1	90	Dauphin.....	853	200
Pletipi.....	1	138	Dog.....	815	64
Quinze, Lac des.....	HW 867 N 857	55	Etawnei.....	1	546
St. Francis, river S. Lawrence (total, 85) part.....	LW 151 N 153	63	Gods.....	585	319
St. John.....	321	375	Goose.....	935	53
St. Louis.....	LW 65 N 67	57	Granville.....	850	181
St. Peter.....	LW 11	130	Island.....	744	550
Simard.....	856	59	Kamuchawie (total, 56) part.....	1,153	30
Timiskaming (total, 110) part.....	HW 593 N 584	55	Kipahigan (total, 59) part.....	963	29
Two Mountains.....	72	63	Kiskittogisu.....	709	99
Waswanipi.....	680	75	Kiskitto.....	696	65
Ontario—			Kississing.....	920	141
Abitibi (total, 350) part.....	868	295	Manitoba.....	813	1,817
Dog.....	1,378	61	Molson.....	1	154
Eagle.....	1,192	137	Moose.....	838	525
Erie (total, 9,940) part.....	572	5,094	Namew (total, 79) part.....	873	8
Huron, including Georgian bay (total, 23,010) part.....	581	13,675	Northern Indian.....	725	150
Kesagami.....	1	90	Nuelin (total, 336) part.....	1	76
La Croix (total, 55) part.....	1,181	25	Oxford.....	612	155
Long.....	1,025	75	Paint.....	615	54
			Pelican, west of lake Winnipegosis.....	837	80
			Playgreen.....	711	257
			Reed.....	911	78
			Red Deer, west of lake Winnipegosis.....	862	86
			Reindeer (total, 2,444) part.....	1,150	386
			St. Martin.....	798	125
			Setting.....	737	49
			Shoal (total, 114) part.....	1,065	6

¹ Elevation not available.

4.—Areas and Elevations of Principal Canadian Lakes, by Provinces—concluded.

Province and Lake.	Elevation.	Area.	Province and Lake.	Elevation.	Area.
	ft.	square miles.		ft.	square miles.
Manitoba—concluded.			British Columbia—		
Sipiweesk.....	598	201	Adams.....	1,334	52
Sisipuk (total, 99) part.....	915	73	Atlin (total, 308) part.....	2,200	307
Southern Indian.....	800	1,200	Babine.....	2,330	194
Stevenson.....	¹	75	Chilko.....	3,842	75
Swan.....	849	100	Eutsuk.....	2,817	96
Talbot.....	845	72	François.....	2,345	91
Todatara (total, 241) part.....	¹	156	Harrison.....	34	87
Walker.....	1,121	62	Kootenay.....	1,741	168
Waterhen.....	829	90	Kotcho (unsurveyed and estimated).....	¹	90
Wekusko.....	840	64	Lower Arrow.....	1,379	59
Winnipeg.....	712	9,398	Okanagan.....	1,123	136
Winnipegosis.....	831	2,086	Ootsa.....	2,666	50
Woods, Lake of the (total, 1,346) part.....	HW1,062 LW1,055	59	Quesnel.....	2,375	100
Saskatchewan—			Shuswap.....	1,137	120
Amisk.....	964	168	Stuart.....	2,225	139
Athabaska (total 3,058) part..	699	2,165	Tagish (total, 138) part.....	2,148	93
Besnard.....	1,294	72	Takla.....	2,270	102
Black Birch.....	1,517	54	Teslin (total, 161) part.....	2,250	65
Candle.....	1,620	56	Upper Arrow.....	1,395	88
Canoe.....	1,415	78	Northwest Territories—		
Churchill.....	1,382	213	Aberdeen.....	130	475
Cold (total, 136) part.....	1,756	36	Artillery.....	1,190	207
Cree.....	1,541	350	Aylmer.....	1,230	340
Cumberland.....	871	93	Baker.....	30	975
Deschambault.....	1,072	209	Clinton-Colden.....	1,226	253
Doré.....	1,506	248	Dubawnt.....	500	1,600
Ile-à-la-Crosee.....	1,379	165	Faber.....	753	163
Kamuchawie (total, 56) part..	1,153	26	Franklin.....	¹	175
Kipahigan (total, 59) part.....	963	30	Garry.....	¹	980
La-Plonge.....	1,476	90	Gras, Lac de.....	1,300	345
La Ronge.....	1,250	450	Great Bear.....	391	11,660
Last Mountain.....	1,608	89	Great Slave.....	495	11,170
Loche, Lac la.....	1,459	70	Hardisty.....	699	107
Montreal.....	1,608	162	Hottah.....	¹	377
Nomeu (total, 79) part.....	873	71	Kaminuriak.....	320	360
Nemeiben.....	1,259	63	Macdougall.....	¹	265
Peter Pond.....	1,382	302	Maguse.....	¹	540
Primrose (total, 181) part.....	1,964	173	Martre, Lac la.....	¹	840
Quill.....	1,704	236	Mackay.....	1,415	250
Reindeer (total, 2,444) part..	1,150	2,058	Marian.....	495	90
Riou.....	¹	75	Nueltin (total, 336) part.....	¹	260
Sisipuk (total, 99) part.....	915	26	Nutarawit.....	¹	350
Smoothstone.....	1,572	110	Pelly.....	¹	331
Snake.....	1,262	159	Point.....	¹	295
Tazin.....	1,130	156	Rae.....	748	74
Wollaston.....	1,300	768	Schultz.....	115	110
Alberta—			Thaalintoa.....	¹	160
Athabaska (total, 3,058) part..	699	893	Todatara (total, 241) part.....	¹	85
Beaverhill.....	2,202	80	Yathkyed.....	300	860
Biche, Lac la.....	1,784	94	Yukon—		
Buffalo.....	2,566	56	Aishihik.....	¹	107
Calling.....	1,947	55	Atlin (total, 308) part.....	2,200	1
Claire.....	699	545	Kluane.....	2,500	184
Cold (total, 136) part.....	1,756	100	Kusawa.....	2,565	56
Lesser Slave.....	1,893	461	Laberge.....	2,100	87
Mamawi.....	699	64	Tagish (total, 138) part.....	2,148	45
Peerless.....	2,267	75	Teslin (total, 161) part.....	2,250	96
Primrose (total, 181) part.....	1,964	8			
Sullivan (variable).....	2,652	62			
Utikuma.....	2,105	85			

¹ Elevation not available.

The river systems of Canada, excluding the Arctic islands, are best studied by segregating the main drainage basins as shown in Table 5.*

5.—Drainage Basins in Canada.

Drainage Basin.	Area Drained. ¹	Drainage Basin.	Area Drained. ¹
	sq. miles.		sq. miles.
Atlantic Basin.		Arctic Basin.	
Atlantic or Maritime Provinces.....	61,151	Great Slave lake.....	370,681
Great Lakes and St. Lawrence river....	359,312	Arctic.....	559,676
Total.....	420,463	Total.....	930,357
Hudson Bay Basin.		Pacific Basin.	
Northern Quebec.....	343,259	Pacific.....	273,540
Southwest Hudson bay.....	283,997	Yukon river.....	127,190
Nelson river.....	368,182	Total.....	400,730
Western Hudson bay.....	383,722	Gulf of Mexico Basin.....	10,121
Total.....	1,379,160	Area, Canada Less Arctic Archipelago	3,140,831

¹ Areas are approximate.

It is noteworthy that the greater part of the Dominion drains into Hudson bay and the Arctic ocean; the Nelson River drainage is exceptional in running *through* the most arable and the most settled part of the West, but, otherwise, the rivers run *away* from the settled areas towards the cold northern salt waters and this adversely affects their industrial utility. The Mackenzie, which drains Great Slave lake is, with its headwaters, the longest river in Canada (2,514 miles) and its valley constitutes the natural transportation route through the Northwest Territories down to the Arctic ocean. From Fort Smith, on the Slave river, large river boats run without any obstruction down to Aklavik in the delta of the Mackenzie, a distance of 1,292 miles. In Eastern Canada it is the Great Lakes and St. Lawrence drainage basin that dominates all others and has undergone the greatest development. The St. Lawrence river and the Great Lakes provide a water route from the Atlantic as far as Fort William and Port Arthur, twin cities situated on lake Superior and only 419 miles from Winnipeg, the half-way mark in distance across the Dominion. The main tributaries of the St. Lawrence all flowing south (most of which have lakes available for reservoiring), together with the main river itself, have developed and undeveloped water powers whose economic value it would be difficult to over-estimate. Apart from the plains region of the West, the rivers of Canada have a vast power potentiality well distributed over the country, as may be seen by reference to the water-power map at the beginning of Chapter XIII. Table 6 gives the lengths of the principal rivers with their tributaries classified according to the four major drainage basins.

* Drainage basins classified according to Dominion Water and Power Bureau, Department of Mines and Resources.

6.—Lengths of Principal Rivers and Tributaries in Canada.

NOTE.—In this table the tributaries and sub-tributaries are indicated by indentation of the names. Thus the Ottawa and other rivers are shown as tributary to the St. Lawrence, and the Gatineau and other rivers as tributary to the Ottawa.

River.	Miles.	River.	Miles.
Flowing into the Atlantic Ocean.		Flowing into Hudson Bay—concluded.	
Natashkwan (to Labrador boundary).....	160	Moose (to head of Mattagami).....	340
Romaine.....	270	Mattagami.....	275
Moisie.....	210	Abitibi.....	340
Marguerite.....	130	Missinaibi.....	265
St. John.....	399	Harricanaw.....	250
Miramichi.....	135	Nottaway (to head of Waswanipi).....	400
St. Lawrence (to head of St. Louis, Minn.).....	1,900	Waswanipi.....	190
Manikuanan.....	310	Rupert.....	380
Outardes.....	270	Eastmain.....	375
Bersimis.....	240	Fort George.....	520
Saguenay (to head of Peribonka).....	405	Great Whale.....	365
Peribonka.....	280	Leaf.....	295
Mistassini.....	185	Koksoak (to head of Kaniapiskau).....	535
Ashuapmucuan.....	165	Kaniapiskau.....	445
Chaudière.....	120	George.....	365
St. Maurice.....	325		
Mattawin.....	100		
St. Francis.....	165	Flowing into the Pacific Ocean.	
Richelieu.....	210	Columbia (total).....	1,150
Ottawa.....	698	Columbia (in Canada).....	459
North.....	70	Kootenay.....	407
Rouge.....	115	Kootenay (in Canada).....	276
North Nation.....	60	Fraser.....	850
du Lièvre.....	205	Thompson (to head of North Thompson).....	304
Gatineau.....	240	North Thompson.....	210
Coulonge.....	135	South Thompson (to head of	
Dumoine.....	80	Shuswap).....	206
South Nation.....	90	Chilcotin.....	146
Mississippi.....	105	West Road (Blackwater).....	141
Madawaska.....	130	Nechako.....	287
Petawawa.....	95	Stuart (to head of Driftwood).....	258
Moir.....	60	Porcupine.....	525
Trent.....	150	Skeena.....	360
Grand.....	165	Bulkley (to head of Maxam Creek).....	160
Thames.....	163	Nass.....	236
French (to head of Sturgeon).....	180	Stikine.....	335
Sturgeon.....	110	Alsek.....	260
Spanish.....	153	Yukon (mouth to head of Nisutlin).....	1,765
Mississagi.....	140	Yukon (int. boundary to head of Nisutlin).....	655
Thessalon.....		Stewart.....	320
Nipigon (to head of Ombabika).....	40	White.....	185
	130	Pelly.....	330
		Macmillan.....	200
		Lewis.....	338
Flowing into Hudson Bay.		Flowing into the Arctic Ocean.	
Hayes.....	300	Anderson.....	465
Nelson (to lake Winnipeg).....	400	Horton.....	275
Nelson (to head of Bow).....	1,600	Mackenzie (to head of Finlay).....	2,514
Red (to head of lake Traverse).....	355	Peel.....	365
Red (to head of Sheyenne).....	545	Arctic Red.....	230
Assiniboine.....	590	Twitya.....	200
Souris.....	450	Liard.....	570
Qu'Appelle.....	270	Fort Nelson.....	260
Winnipeg (to head of Firesteel).....	475	South Nahanni.....	250
English.....	330	Petitot.....	260
Saskatchewan (to head of Bow).....	1,205	Athabaska.....	765
North Saskatchewan.....	760	Pembina.....	210
South Saskatchewan (to head of Bow).....	865	Slave.....	258
Bow.....	315	Hay.....	350
Belly.....	180	Peace (to head of Finlay).....	1,054
Red Deer.....	385	Finlay.....	250
Churchill.....	1,000	Parsnip.....	145
Beaver.....	305	Smoky.....	245
Kazan.....	455	Little Smoky.....	185
Dubawnt.....	580	Coppermine.....	525
Severn.....	420	Back.....	605
Winisk.....	295		
Attawapiskat.....	465		
Albany (to head of Cat river).....	610		

Section 3.—Islands.

The islands of Canada are among its most remarkable geographic features. They include the very large group lying in the Arctic ocean, the fringe of both large and small islands off the Pacific coast, those of the Maritime Provinces and Quebec in the Atlantic ocean and the gulf of St. Lawrence, together with the islands of the Great Lakes and other inland waters. The Arctic islands are of vast extent, Baffin, Victoria, and Ellesmere, the three largest, being approximately 201,600, 80,450, and 75,024 square miles in area, respectively, but Banks, Devon, Somerset, Prince of Wales, Melville, and Axel Heiberg are each larger than Prince Edward Island; Southampton, another very large island, lies just within the wide mouth of Hudson bay. Their economic potentialities, beyond deposits of coal and other minerals, have not been fully established. The Pacific Coast islands, with the exception of Vancouver island and the Queen Charlotte group, are small and dot the western coast of British Columbia from Dixon entrance to the southern boundary of the province. Vancouver island is 285 miles long and from 40 to 80 miles broad, covering an area of about 12,408 square miles; the mountain range which forms its backbone rises again to form the Queen Charlotte islands farther north. These islands figure largely in the mining, lumbering, and fishing industries of the West, and together with the bold and deeply indented coast-line provide a region for scenic cruises rivalling those of Norway.

On the eastern coast of the Dominion are the island province of Prince Edward Island, the island of Cape Breton (an integral part of Nova Scotia), Anticosti and the Magdalen group (included in the province of Quebec), and the islands of Grand Manan and Campobello (part of the province of New Brunswick) in the bay of Fundy. Prince Edward island is 2,184 square miles in area, Cape Breton 3,970 and Anticosti of about the same extent. Fishing activities in these eastern islands are important, while agriculture on Prince Edward island and mining on Cape Breton are the chief occupations of the inhabitants.

Manitoulin island and the Georgian Bay islands in lake Huron and the Thousand Islands group in the St. Lawrence river, at its outlet from lake Ontario, are the more important islands of the inland waters.

PART II.—GEOLOGY.

Section 1.—Geology of Canada.*

In the section on Orography, pp. 8-10, the physical features of Canada have been considered and the natural divisions have been briefly described. These physiographic divisions depend fundamentally on underlying differences of geological structure and hence are geomorphic ones as well as physiographic. A description of the geology of Canada hence involves an account of the geology of each of these divisions. They are shown in the map on p. 17 and include:—

(1) The Canadian Shield, a vast V-shaped area of ancient rocks surrounding Hudson bay.

(2) The St. Lawrence Region, a lowland belt bordering the St. Lawrence river and extending westward through southern Ontario to lake Huron. It is underlain chiefly by flat or gently dipping strata of Palæozoic age.

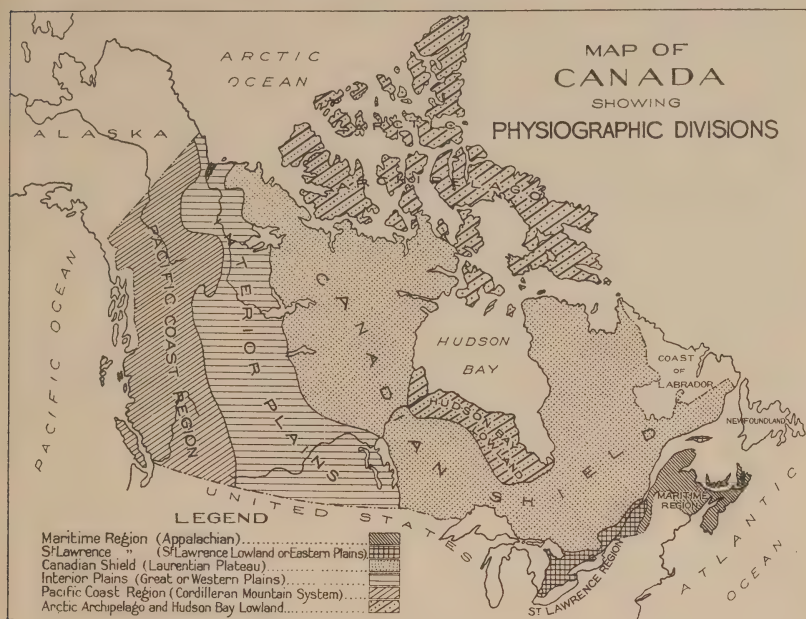
(3) The Appalachian and Acadian Regions, comprising the Maritime Provinces and most of that part of Quebec lying south of the St. Lawrence river. It is a hilly or mountainous region and is made up largely of disturbed beds.

(4) The Arctic Archipelago, with which is linked the Hudson Bay Lowland. The former includes the islands lying north of the Canadian Shield, while the latter is a broad, flat region, underlain by flat-lying Palæozoic beds.

* By F. J. Alcock, Ph.D., Mines and Geology Branch, Department of Mines and Resources, Ottawa.

(5) The Interior Plains Region of Manitoba, Saskatchewan, and Alberta, which stretches down Mackenzie valley to the Arctic ocean. It is underlain by only slightly disturbed Palæozoic and Mesozoic strata.

(6) The Cordilleran Region, including the mountainous country of the Pacific coast which is developed on highly disturbed rocks.



The following geological time scale will assist the reader by showing the relationship of the various formations mentioned in this article to the geological map which faces p. 26.

GEOLOGICAL TIME SCALE

Eras.	Sub-Eras.	Periods.	Orogenies.
CENOZOIC.....	QUATERNARY.....	Recent Pleistocene	Laramide Coast intrusions
	TERTIARY.....	Pliocene Miocene Oligocene Eocene	
		Cretaceous Jurassic Triassic	
		Permian Pennsylvanian Mississippian Devonian Silurian Ordovician Cambrian	
MESOZOIC.....	CARRONIFEROUS.....	Keweenaw	Appalachian
PALÆOZOIC.....		Huronian	Shickshockian
PROTEROZOIC (late Precambrian).....		Timiskamian	Killarnean
ARCHEAN (early Precambrian).....		Keewatin	Algoman
			Laurentian

The Canadian Shield.—Comprising an area of nearly two million square miles, or more than one-half of the whole of Canada, this plateau-like region rises only locally to more than 1,500 or 2,000 feet above sea-level, except in Labrador where altitudes up to 5,000 feet are reached in certain places. Its most characteristic feature is its low relief. Standing anywhere on an elevation an even skyline meets the eye in every direction. Throughout most of the region the hills and ridges rise no more than 100 or 200 feet above the level of the adjacent lakes and valleys. In places, however, as locally along the southern margins of the Shield and in northeastern Quebec along the Labrador border, the relief is considerably more rugged. Though the general relief is low, the region in detail has a very irregular topography consisting of low, hummocky hills and ridges separated by depressions which are commonly occupied by lakes or muskegs. Lakes of all sizes and shapes, and containing numerous islands, dot practically the entire area, in places giving the appearance of a drowned area with only the ridge tops appearing. The rivers as a rule are mere successions of lake expansions connected by stretches in which rapids and waterfalls are numerous.

The rocks of the Shield are mainly of Precambrian age. They form a continental mass which in Precambrian time extended out in all directions beyond the present limits of the Shield. During the succeeding Palæozoic and Mesozoic Eras the Shield was many times at least partly flooded by seas which advanced over it and later retreated. The sediments that accumulated in these seas were largely swept away by later erosion.

From the beginning of the Cambrian period on to the present, the Shield has been a stable mass. During this time it has suffered vertical movements at intervals but it has been unaffected by any folding or mountain-building deformation. Its earlier or Precambrian history, however, was very complex and included periods of volcanism, sedimentation, folding, mountain-building, and igneous intrusion, and also long intervals of quiescence in which erosion was the active process.

Precambrian time can be conveniently divided into two major divisions, the Archæan or early Precambrian and the Proterozoic or late Precambrian. The Archæan in turn falls into two subdivisions, in the earlier of which volcanism took place on a tremendous scale and lavas and tuffs, usually referred to as Keewatin, accumulated over wide areas in thicknesses measured in thousands of feet. With the volcanics are locally associated sediments, in many places altered to mica schists and gneisses. In the Rainy Lake region of western Ontario a thick succession of such sediments, known as the Couchiching series, lies below the Keewatin lavas. In northern Manitoba and Saskatchewan interbedded lavas and sediments of probably similar age are referred to as the Wekusko group. In eastern Ontario and southwestern Quebec a thick series composed of limestone, quartzite, and sedimentary gneiss, known as the Grenville series, is also usually regarded as having been deposited during this first part of the early Precambrian Era. This period was terminated by widespread but gentle folding movements accompanied by some intrusions of granite.

During the second period of the early Precambrian, a thick formation of elastic sediments was deposited. These are commonly referred to in northern Ontario and Quebec as the Timiskaming series. In northern Manitoba and Saskatchewan similar sediments apparently occupying a corresponding stratigraphic position are referred to as the Missi series. Certain series of sediments, such as the Sudbury of the

Sudbury region, the Doré at Michipicoten, the Ridout of the Woman River area, and others, are of disputed age being regarded by some geologists as Timiskamian and by others as belonging in the Keewatin. The period of Timiskamian sedimentation was succeeded by a mountain-building revolution which was accompanied by widespread intrusion of granite, commonly referred to as the Algoman batholiths. The time of the Algoman intrusions was a great mineral-forming epoch. Most of the gold ores of the Shield, and the copper-zinc sulphide replacement deposits, such as those of Noranda, Flin Flon, Sherritt-Gordon and many others, were formed at this time from mineralizers given off by these intrusives. A long period of quiescence followed in which erosion reduced the region to one of low relief.

The Proterozoic or late Precambrian included the long era during which thick series of sediments were deposited on this eroded complex of Archæan rocks. These strata are best developed in the region around lake Superior and north of lake Huron. They belong to two systems, an older known as the Huronian and a younger called the Keweenawan. North of lake Huron the Huronian strata consist of an older series called the Bruce—made up of conglomerates, quartzites, and impure dolomitic limestone, totalling in thickness up to 12,000 feet—and a younger series named the Cobalt—made up of boulder conglomerate and other materials of probable glacial origin, overlain by quartzite and slightly calcareous quartzite, the whole having a thickness up to 10,000 feet. These two series are separated by an unconformity but the time interval represented was probably not great. The beds for the most part lie with only gentle dips except on the north shore of lake Huron and eastward where they stand at high angles as a result of mountain-building movements. The Huronian rocks are intruded by dykes and sills of quartz diabase extending over wide areas of northeastern Ontario. These intrusions of what is called the Nipissing diabase attracted the silver-cobalt camp of Cobalt, and subsidiary camps. Copper is associated with this diabase in the western part of the region. The Huronian rocks are cut by masses of Killarney granite intruded during the mountain-building period at the close of the Huronian to which reference has been made, and both the Huronian sediments and the Nipissing diabase are cut by small masses of a younger granite which is rich in alkalies.

At Sudbury a series of volcanic and sedimentary rocks filling the basin of the nickel irruptive is known as the Whitewater series. It has usually been referred to as Upper Huronian. The nickel-bearing irruptive was intruded at the base of this series as a saucer-shaped sill or laccolith, 37 miles long and 17 miles wide. It differentiated from norite at the base to micropegmatite at the top. This intrusive is the source of the nickel-copper ores of the region, the deposits occurring along the outer margins of the mass or in offsets where the mass injects the surrounding rocks. Cutting all these rocks are trap and olivine diabase dykes.

North of lake Superior is a group of late Precambrian rocks which has been described under the term Kaministiquian. The group includes the Animikie series of conglomerate, iron formation, and shale; the Sibley series of conglomerate, sandstone, limestone, and tuff; and the Osler series of lavas, conglomerate, sandstone, and tuff. Strata resembling the Animikie rocks of the Lake Superior region also occur in the central part of Ungava peninsula and on the Belcher islands and the east coast of Hudson bay.

In the Northwest Territories a group of Proterozoic rocks known as the Great Slave group consists of sediments and volcanics and rests on an old erosion surface crossing granitic intrusives and the upturned edges of Archæan sediments. The group consists of a lower part made up of conglomerate, sandstone, quartzite, shale,

iron formation, limestone, tuff, agglomerate, andesite, and dolomite, and an upper part of dolomite, shale, limestone, sandstone, and lavas with interbeds of argillite. Still farther north in the Bathurst Inlet region of the Arctic coast are Proterozoic strata. Resting on granite is the Epworth dolomite which has a thin basal conglomerate and grades up through arkose into a cherty dolomite. Above this is the Kanuyak formation, made up of fine-grained calcareous tuffs and tuff-conglomerates, which at one place shows a structural unconformity with the Epworth beds. A still younger formation is the Goulburn quartzite which contains rounded fragments apparently of the Epworth and Kanuyak. The next younger rocks are those of the Coppermine River series to which reference will be made later.

The Keweenawan, the later division of the Proterozoic, saw the accumulation of great thicknesses of clastic deposits, in places accompanied by volcanic rocks, over various parts of the Shield. The type area is on the south side of lake Superior where thousands of feet of sediments and lavas are exposed. On the Canadian side several smaller areas occur on the east coast of lake Superior.

In the northwestern part of Canada are wide areas underlain by flat-lying or only gently dipping beds which are regarded as late Precambrian in age and are commonly correlated with the Keweenawan. The beds consist for the most part of sandstone and arkose with some conglomerate and shale. South of lake Athabaska is a broad area of these rocks to which the term Athabaska series has been applied. Smaller patches also occur north of the lake and to the northeast is another considerable area along the Dubawnt river. Interbedded basaltic flows and diabase dykes occur in places with these rocks. On Great Slave lake the Etthen series of clastic sediments is considered to be of equivalent age, while farther north on the Coppermine river and at Bathurst inlet a series of interbedded sediments and volcanics is known as the Coppermine River series. It carries notable copper deposits. Trap dykes, commonly considered as Keweenawan in age, are of wide occurrence over the entire Shield and are the youngest of the Precambrian rocks.

During the Pleistocene or Glacial period, the Shield was heavily glaciated by huge glaciers of continental extent. One of these sheets had its gathering ground west of Hudson bay and another in the heart of Labrador. From these centres the ice moved out in all directions. In its advance it scoured off the residual soil, smoothed down the topography, polished and striated the rock surface, and by scattering debris irregularly over the surface completely disorganized the drainage. The result was the formation of the numerous lakes which are everywhere so characteristic a feature of the region. On the retreat of the glaciers, large temporary lakes stood in places in front of ice and in these accumulated clay and other fine stratified deposits forming what are known as clay belts.

The Canadian Shield is a great store-house of mineral wealth and hence offers an attractive field to the prospector. It is not because its rocks are of Precambrian age that such is the case. It is rather because parts of it offer geological conditions favourable for the occurrence of minerals. Ore deposits the world over have, for the most part, resulted from mineralizing solutions given off from masses of igneous rocks during the late stages of their intrusion and cooling, and where we have an association of older rocks invaded by intrusives we may expect to find mineralization, no matter what age the rocks may be. During the Precambrian the rocks of the Shield, as has already been mentioned, were extensively invaded from time to time by intrusive masses of composition varying from acid to basic. Reference has been made to the nickel-copper deposits associated with the Sudbury irruptive, the silver-cobalt ores occurring with the Nipissing diabase, the gold deposits of Ontario

and Quebec associated with porphyry and other granitic rocks. The gold-bearing copper ores of western Quebec, the zinc-copper ores of northern Manitoba, the pitchblende and silver deposits of Great Bear lake are other important mineral occurrences which are being developed. In eastern Ontario and western Quebec, where granite has intruded limestone and other sediments of the Grenville series, occur deposits of mica, graphite, feldspar, magnesite, fluorite, kaolin, molybdenite, talc, apatite, and other minerals.

The St. Lawrence Region.—The St. Lawrence Region is a lowland which stretches westward from Quebec city for a distance of some 600 miles to lake Huron. It begins as a narrow strip bordering either side of the St. Lawrence and gradually widens until at Montreal it has a width of 120 miles. Its northerly border continues on up the Ottawa river but 50 miles west of Ottawa the belt is interrupted by a projection of the Canadian Shield known as the Frontenac axis which extends southward crossing the St. Lawrence between Kingston and Brockville. West of this axis the lowland occupies a triangular area lying between lakes Ontario, Erie, and Huron and an east and west line drawn from Kingston to the south end of Georgian bay. This western part in turn falls into two divisions separated from each other by a prominent topographic feature, the Niagara escarpment, an abrupt, eastward-facing rise of 250 to 300 feet, extending from Niagara river in a northwest direction to Bruce peninsula. Still farther to the northwest, the escarpment is continued by the northward-facing cliffs of Manitoulin and adjacent islands.

The St. Lawrence Region is underlain by Palæozoic strata ranging in age from late Cambrian to late Devonian. For the most part the beds lie flat or at low angles. In places, however, as in southwestern Ontario, they are folded into broad low domes and elsewhere, as in the vicinity of Ottawa, they are traversed by faults of considerable magnitude. In general the beds dip away from the Canadian Shield so that as one proceeds in a direction leaving the Shield, progressively younger strata are encountered.

The strata are almost wholly of marine origin and were deposited in seas that spread out over a large part of the continent. Differential movements caused these seas to advance and retreat, so that the sediments which were deposited in them vary considerably. There are also local gaps in the sedimentary sequence caused by these movements but the movements were so gentle that there are no angular unconformities.

The oldest of the Palæozoic formations is the Potsdam sandstone of Upper Cambrian age. It is followed by a thick succession of Ordovician strata. In the Ottawa-Montreal region these beds have a thickness of about 6,000 feet and are the youngest measures there are. They include Beekmantown or early Ordovician dolomitic limestones, Chazy sandstones, shales, and limestones, Black River limestone, and Trenton limestone deposited during the Middle Ordovician, and Upper Ordovician beds made up of the Utica shale, Lorraine shales with limestone and sandy layers, and the Richmond group of shales and limestones. The Lorraine and Richmond rocks are developed chiefly southeast of the St. Lawrence.

West of the Frontenac axis and east of the Niagara escarpment, the middle division of the St. Lawrence Region is also underlain by Ordovician strata. Along the escarpment these beds are succeeded by Silurian measures of which the lowest group is the Medina composed of sandstone, shale, and shaly limestone. These beds are succeeded by shales and limestones of the Clinton group which in turn are followed by the Rochester shale and Lockport dolomite of the Niagara group. Above the Lockport is the Guelph dolomite and this in turn is overlain by the Cayuga

group made up of the Salina formation and the lower Munroe dolomite and shale. The total thickness of the Silurian measures is around 1,750 feet.

The Cayugan beds are terminated by an erosion surface upon which rest Devonian beds about 1,000 feet in thickness. The succession from bottom to top is as follows: Sylvania sandstone, Upper Munroe dolomite, Oriskany sandstone, Onondaga limestone, Delaware limestone, Hamilton limestone and shale, Huron shale, and Port Lambton shale.

The only intrusive rocks of the St. Lawrence Region occur in the eastern part in what are known as the Monteregian hills. These are eight in number occurring along an approximately east and west line some 50 miles long. The most westerly is Mount Royal at Montreal. The hills are circular or oval in outline and rise abruptly to elevations of from 600 to 1,200 feet above the surrounding flat country. The flanks of the hills consist of altered and hardened sediments and the centres are composed of intrusive rocks, including various alkali types such as nepheline syenites, essexites, etc. The age of these intrusives may be as late as Pliocene.

The whole region was overrun by Pleistocene ice sheets and much of the bed-rock is covered by debris left by these glaciers. At Toronto stratified deposits carrying plant and animal remains lie between deposits of glacial material. These layers show that the region was crossed at least three times by ice sheets coming from central Ungava and that between these advances the region had a climate considerably milder than the present. In late Pleistocene time the region was depressed and an arm of the sea extended up the St. Lawrence valley as far at least as Brockville and up the Ottawa River valley beyond Ottawa. At Ottawa the sea stood at least 688 feet above its present level. In this sea, layers of clay were deposited and along its shores deposits of sand accumulated. Eventually uplift of the land caused the withdrawal of this sea to which the name Champlain is given.

The chief mineral occurrences of the St. Lawrence Region include petroleum and natural gas which are produced in southwest Ontario, salt from the counties bordering lakes Huron and St. Clair, and gypsum from the Grand River valley. Other materials which are available at many places include limestone and dolomite used in chemical and metallurgical industries, rock for construction purposes and clay for brick, tile, and cement manufacture.

Appalachian and Acadian Regions.—The Appalachian and Acadian Regions include that part of Canada lying south of the St. Lawrence river and east of a line running from Quebec city south to the foot of lake Champlain. The Appalachian Region, whose eastern boundary in Canada is the Restigouche river and Chaleur bay, is a continuation of the Appalachian Mountain system of the eastern United States. The Acadian Region lies to the southeast and comprises the provinces of New Brunswick, Nova Scotia, and Prince Edward Island.

The region is for the most part mountainous or hilly. In southeastern Quebec the Notre Dame mountains, consisting of three roughly parallel ridges trending northeast, reach elevations up to 3,100 feet and in Gaspé peninsula, the Shickshocks, actually a continuation of the same range, have heights up to 4,200 feet. Many of the mountain summits are flat-topped, showing that the region is really a dissected plateau. The Acadian Region is also largely one of plateaux, ridges, and valleys. In central New Brunswick is a rugged area with summits rising over 2,000 feet. To the east of this is a lowland area of some 10,000 square miles comprising the eastern portion of the province and all of Prince Edward Island. It nowhere rises over 600 feet above the sea. Nova Scotia is largely an upland region which in the northern part of Cape Breton island reaches elevations of 1,500 feet.

The rocks of the Appalachian and Acadian Regions include sediments, volcanics, and intrusives, chiefly of Palæozoic age. In a few places rocks of Precambrian age are known and along the Bay of Fundy coast are a few areas underlain by Mesozoic rocks. The lowland area of eastern New Brunswick is underlain by little disturbed Carboniferous beds. Elsewhere, however, throughout the region, the rocks are nearly everywhere thrown into folds with axes trending in a northeast direction and are in addition broken by faults giving rise to a complex structure typical of the Appalachian Region in general. The chief period of deformation in this part of Canada, however, was during the Devonian, whereas to the south, in the United States, the greatest disturbances took place later during the Permian at the close of the Palæozoic.

At Saint John city in southern New Brunswick is exposed a series of early Precambrian rocks made up of limestone, dolomite, quartzite, and gneiss. It is overlain by a thick succession of late Precambrian volcanic rocks upon which rest Cambrian strata. Precambrian rocks also occur in Cape Breton island. In Gaspé peninsula along the north side of Chaleur bay the Macquereau series, composed largely of quartzite, rests unconformably below Ordovician strata and may be Precambrian. Precambrian rocks have been described as occurring in central New Brunswick and in southwestern Quebec. Some of the occurrences are probably, however, of Palæozoic age.

In the mainland of Nova Scotia a thick series of altered sediments, known as the Meguma or Gold-bearing series covers wide areas and is believed to be of late Precambrian age. The lower half of its 35,000 feet thickness consists dominantly of quartzites and the upper half of slates. The series is folded along northeast lines and is broken by northwest faults, the horizontal displacement of some of which exceed a mile. The rocks are intruded by dykes and sills of diabase and by batholithic masses of grey and red granites of Devonian age.

Cambrian formations occur in southeastern Quebec, in southern New Brunswick, and in northeastern Cape Breton. In early Ordovician times sediments were deposited in the St. Lawrence River Region. The Sillery formation of red and green shales with interbedded sandstone has at Quebec a thickness of 2,000 feet. A younger series, called the Lévis, consists of dark shales and thin-bedded limestones with a thickness of possibly as much as 5,000 feet. It forms a band varying in width from 6 to 35 miles; its beds have been folded, faulted, and in places overturned. Mid-Ordovician rocks occur in southwestern Quebec and in Gaspé and northern New Brunswick. Late Ordovician rocks are developed in the Matapédia River and Chaleur Bay districts. At the close of the Ordovician there were extensive mountain-building movements. Masses of peridotite which intrude the Ordovician and older rocks may have originated at this time.

Silurian rocks are exposed in southeastern Quebec, in Gaspé, in New Brunswick, and in Nova Scotia at Arisaig and a few other places. The next marine invasion was in Lower Devonian time when great thicknesses of sediments with interbedded volcanics accumulated in New Brunswick and Gaspé. During the Middle Devonian, a thick series of sandstones accumulated in Gaspé. In the Upper Devonian was deposited in the vicinity of Maguasha in the Gaspé coast a group of conglomerates, sandstones, and shales, one member of which is noted for the fossil fish it has yielded. Towards the close of the Middle Devonian, the whole Appalachian and Acadian Regions were affected by mountain-building movements accompanied by the intrusion of batholithic masses of granite.

Rocks of Carboniferous age underlie the lowland belt forming much of the southeastern half of New Brunswick, the part of Nova Scotia north of the Cobequid mountains, part of the lowland south of these mountains, southwestern and north-eastern Cape Breton island and all of Prince Edward island. With the Lower Carboniferous or Mississippian rocks occur the extensive gypsum deposits and the salt beds of Nova Scotia and New Brunswick and also the bituminous shales of these provinces. The Upper Carboniferous or Pennsylvanian strata contain the coal measures which occur at Sydney, and at other places in Nova Scotia and at Minto in New Brunswick. The Carboniferous beds have in places been folded and faulted but there are wide areas in which the strata have been but little disturbed since they were deposited.

Red sandstones deposited during the Triassic period are exposed in a number of small areas along the Bay of Fundy coast. In places as at North Mountain, Nova Scotia, the beds are accompanied by lava flows. During the Pleistocene the region was glaciated. At certain stages there were apparently local gathering grounds for glaciers in central New Brunswick and in central Gaspé.

The chief mineral deposits of the Appalachian and Acadian Regions include coal, asbestos, and gypsum. The coal and gypsum, as has already been mentioned, occur in the Carboniferous measures. Asbestos occurs in serpentinized peridotite in southeastern Quebec. Chromite also occurs with the peridotite. Gold occurs in quartz veins in the Gold-bearing series of Nova Scotia. Many of the deposits are located on domes or pitching anticlines. Zinc-lead deposits occur in central Gaspé in veins cutting lower Devonian beds. At Stirling in the southern part of Cape Breton island, zinc, lead, and copper sulphides occur in a series of volcanic rocks. Copper and iron pyrite deposits occur in southern Quebec. Salt occurs in Nova Scotia and New Brunswick.

The Arctic Archipelago and Hudson Bay Lowland.—The Arctic archipelago includes the islands lying north of the Canadian Shield. They have a land area of over half a million square miles. Save for northward extension of the area of the rocks of the Canadian Shield, the islands for the most part are a series of plateaux formed of gently dipping strata.

The main Precambrian belt extends through Baffin island to Ellesmere island. Its rocks consist chiefly of granite and granite-gneiss intrusive into various types of gneisses and schists. Palæozoic strata, including Cambrian, Ordovician, Silurian, Devonian, and Carboniferous beds, cover most of the remaining area. Triassic rocks occur on the Sverdrup islands and a number of areas are underlain by Tertiary beds some of which are coal-bearing. Coal is also associated with some of the Upper Carboniferous strata at a number of places.

The Hudson Bay Lowland bordering the west side of Hudson bay has a length in a northwest direction of 800 miles, a width of from 100 to 200 miles and an area of 120,000 square miles. It rises from sea-level with a scarcely perceptible gradient to a height of about 400 feet. It is underlain by flat-lying rocks most of which are of Palæozoic age ranging from Ordovician to Devonian. An area of Mesozoic beds carrying lignite occurs in the Moose River region.

The seas in which the Palæozoic rocks which are now exposed in the Arctic Archipelago, the Hudson Bay Lowland, and the St. Lawrence Region were deposited extended at times widely over the Canadian Shield. Palæozoic outliers are known on lake St. John, lake Nipissing, and lake Timiskaming in the south, and on lake Nicholson west of Hudson bay. These outliers are mere remnants which have survived the erosion of Mesozoic and Tertiary time.

The Interior Plains. The Interior Plains division of Canada is part of a great plains region in the interior of the continent stretching from the gulf of Mexico to the Arctic ocean. In Canada it extends from the Canadian Shield on the east to the Cordillera on the west. At the United States border it has a width of 800 miles but in the extreme northwest at the mouth of the Mackenzie river it is less than 100 miles wide. Throughout most of the region the underlying Palæozoic, Mesozoic, and Tertiary rocks are nearly flat-lying. In the northwestern part of the area, however, the Franklin range, which lies between Great Bear lake and Mackenzie river, is composed of folded strata. In western Alberta, also, the rocks are folded and faulted.

Geologically the region falls into three zones. On the east a narrow plain known as the Manitoba lowland is developed on flat-lying Palæozoic strata which range in age from Ordovician to Devonian. In Manitoba the Ordovician beds rest on the Precambrian rocks of the Canadian Shield and commonly present a low escarpment facing the Shield. To the northwest this zone broadens to form the Mackenzie lowland. Here over wide areas Silurian measures form the base of the Palæozoic section. In the Franklin mountains, however, red quartzites and sandstones of the Mount Clark formation are regarded as of probable Lower Cambrian age. They are succeeded by Middle and Upper Cambrian sandstones and shales. Beds regarded as of probable Ordovician age are also known to occur at the base of mount Kindle east of Wrigley and beneath the Silurian dolomite of the Great Slave Lake area. Over considerable areas strata of Cretaceous age also occur in the Mackenzie lowland region, as for example on Liard river, on the western shores of Great Bear lake, and at several places along the Mackenzie. At the mouth of Bear river is an area covered by partly consolidated Tertiary sands and clay carrying lignite beds.

The second zone includes much of southwestern Manitoba and southern Saskatchewan and Alberta. It is a broad belt underlain by Cretaceous rocks. Its eastern border, where these strata overlap the underlying Palæozoic sediments, is an abrupt rise known as the Manitoba escarpment. Its surface gradually rises from an elevation of from 1,000 to 2,000 feet at the escarpment to from 4,000 to 5,000 feet at the border of the mountains on the west.

The third zone consists of the plateaux of Wood mountain and the Cypress hills which rise up to elevations of 1,000 feet above the level of the surrounding region. They are composed of flat-lying beds of Tertiary age.

In Pleistocene time glacial drift was widely scattered over the region. On the retreat of the ice deposits, clay accumulated in lakes which stood in front of the waning ice sheet. Much of southern Manitoba formed the bed of glacial lake Agassiz.

The Interior Plains Region is the great wheat-producing area of Canada. Coal mining is an important industry. Bituminous coal and lignites are produced in large quantities in Alberta and in small amounts in Saskatchewan from Cretaceous and Eocene beds. Natural gas is produced in large quantities from various horizons of the Cretaceous in Alberta. Petroleum has been found in the Devonian beds of the lower Mackenzie valley north of Norman, in Cretaceous strata at a number of localities in Alberta, and in Palæozoic rocks in Turner valley. Along the Athabaska river the basal member of the Lower Cretaceous, known as the McMurray or the Tar sands, is heavily impregnated with bitumen. Gypsum is obtained from the Palæozoic rocks of Manitoba and also occurs in northern Alberta. Deposits of lead and zinc occur in Devonian limestones at certain places south of Great Slave lake.

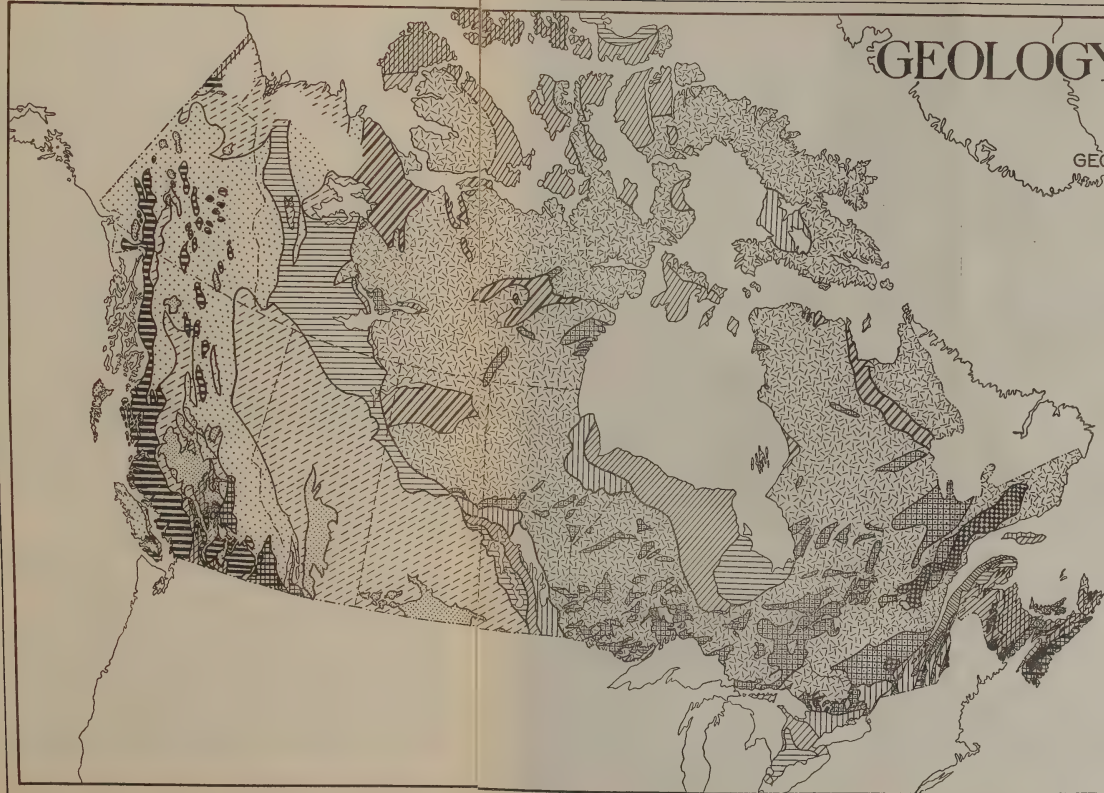
The Cordilleran Region.—The Cordilleran Region comprises the mountainous country bordering the Pacific ocean. The part of it which lies in Canada has an average width of 400 miles, a length in a northwest direction of 1,500 miles, and an area of 600,000 square miles. It is made up of three principal zones. On the east is the Rocky Mountain range; along the coast is a broad belt of mountains known as the Coast range, while between these two lies a third or intermediate belt made up of plateaux and mountain ranges. The Rocky mountains have a maximum width of 100 miles and have many peaks with elevations of from 10,000 to 12,000 feet. The Coast range, varying in width from 50 to 100 miles, rises abruptly from the coast to peaks which along the axis of the range reach elevations of from 7,000 to 10,000 feet. The interior plateau and mountain belt is represented in the north by the Yukon plateau, a gently rolling upland broken into a series of flat-topped ridges by valleys several thousand feet deep. In the southern part of British Columbia the interior region is a plateau rising 3,000 to 4,000 feet above sea-level and cut by valleys a thousand or so feet in depth. To the west this plateau either joins the Coast range directly or else is separated from it by the Cascade range and other mountains. To the east between the plateau and the Rocky mountains are a series of ranges separated by northwest-trending valleys. The Selkirk range with peaks over 11,000 feet is the most important of these.

The rocks of the Cordilleran Region range in age from Precambrian to Recent. The Rocky Mountain belt is composed of great thicknesses of Precambrian, Palæozoic, and Mesozoic sediments, in most places unaccompanied by plutonic or volcanic rocks. The Coast range is essentially a complex batholith of granite of late Jurassic or early Cretaceous age cutting and enclosing sediments and volcanic rocks of earlier Mesozoic age. The Interior belt of plateaux and mountain ranges is underlain by Palæozoic, Mesozoic, and Tertiary sediments and volcanic rocks. The pre-Tertiary beds are cut by numerous bodies of plutonic rocks and in several districts strata of Precambrian age are exposed.

The geological history of the Canadian Cordilleran Region may be briefly summarized as follows: In Precambrian time sediments which now are in the form of limestones, gneisses, and schists were deposited in the interior belt. In Yukon these strata are known as the Yukon group and in central British Columbia as the Shuswap group. These have been altered by intrusive rocks and included with them may be metamorphosed phases not only of Precambrian rocks but also of much later rocks. In late Precambrian time a thick series of argillites and related sediments accumulated on the site of the southern Rockies and farther west in the region now occupied by the Purcell mountains. The Purcell series, consisting dominantly of quartzites, has a thickness of over 20,000 feet.

From the Cambrian to the Carboniferous, sedimentation progressed in the Rocky Mountain and Purcell region. Cambrian strata are best known in the Bow and Kicking Horse valleys along the main line of the Canadian Pacific railway, where a total thickness of more than 18,000 feet of Cambrian beds are exposed. Another thick section can be seen in the Mount Robson district along the Canadian National railway. In both these areas the Cambrian beds are succeeded by Ordovician strata. Silurian limestone occurs south of Kicking Horse river, in Yukon, and in the western part of Mackenzie mountains. In Devonian time the whole eastern Cordilleran Region was submerged and calcareous beds, in places several thousand feet thick, were deposited. In the western part of the Rocky mountains they in places succeed Silurian beds but in the south and at various places in the eastern part of the Rockies they rest on late Precambrian or Cambrian strata. Carboniferous beds succeed the Devonian strata at many places in the Rockies.

GEOLOGY OF CANADA



LEGEND

GEOLOGICAL AGE

DESCRIPTION

Tertiary



Sedimentary and Volcanic

Mesozoic



Intrusives (Chiefly Granitic Rocks)



Cretaceous & Jurassic (Sedimentary & Volcanic)



Triassic (Sedimentary & Volcanic)

Palaeozoic



Intrusives (Mostly Devonian)



Permian



Carboniferous



Devonian



Silurian



Ordovician



Cambrian

Precambrian



Basic Intrusives



Acid Intrusives (Granite, etc.)



Late Precambrian or Early Cambrian



Late Precambrian (Animikie & Keweenaw)



Early Precambrian Sedimentary & Volcanic Formations (Cobalt, Bruce, Grenville, Keewatin, etc.)



Unclassified (Chiefly Palaeozoic)

CHARACTERISTIC LIFE	TYPICAL DIAGRAMMATIC SECTION OF THE EARTH'S CRUST	CHARACTERISTIC ROCKS
AGE OF MAN		
AGE OF MAMMALS AND MODERN PLANTS	Quaternary	glaciated, and gravel
	Tertiary	shales and sandstones
AGE OF REPTILES	Cretaceous	shale and sandstone
	Jurassic	sandstone, limestone, and sandstone
	Triassic	sandstone, shale, and sandstone
AGE OF AMPHIBIANS AND LYCOPODS (MOSS-LIKE TREES)	Carboniferous	shale, sandstone, and sandstone
	Devonian	shale and sandstone
	Silurian	shale and sandstone
AGE OF FISHES	Ordovician	shale and sandstone
AGE OF HIGHER (SHELLY) INVERTEBRATES	Cambrian	shale and sandstone
AGE OF PRIMITIVE INVERTEBRATES AND ALGAE	Precambrian	schistose rocks

Around Banff they include a thickness of 5,000 feet. In the interior belt around Kootenay lake Carboniferous beds rest directly on Precambrian rocks.

During the Triassic and Jurassic, sedimentation and volcanism on a vast scale occurred in the region from the Rocky mountains westward to the Pacific ocean, and on the site of what are now Vancouver island and the Queen Charlotte islands. In late Jurassic and early Cretaceous times this whole region was deformed. The Selkirk and Coast ranges were produced and the Coast range batholith was intruded. In later Cretaceous time, sediments were deposited on both sides of these Jurassic ranges.

Long continued erosion in late Cretaceous time reduced the mountains to a peneplain and unroofed their granite cores. During the Eocene occurred the great Laramide revolution which produced the Rocky mountains. The rocks of this belt were folded and faulted and in places great blocks of older rocks were thrust over younger beds. Local intrusions of igneous rock accompanied the deformation. In the Oligocene local movements accompanied by igneous intrusions again took place. During the Miocene period great fissure eruptions took place while during the succeeding Pliocene period there was further volcanism with general uplift and subsequent valley cutting. In the Pleistocene or Glacial period most of the Cordilleran Region with the exception of some of the higher ridge tops was covered by what is known as the Cordilleran ice sheet. The whole region was depressed at this time but in post-glacial time there has been uplift ranging from 450 to 1,000 feet.

The Cordilleran Region is a great mineral area. Most of the deposits are related to the Coast Range batholith. They occur principally along the borders of the batholith and in the older rocks surrounded by the intrusives and were produced by mineralizing solutions given off from the igneous masses. Some of the more important deposits are the copper ores of Hidden Creek, Britannia, and Allenby mountain, the gold-silver deposits of Salmon River district, the silver-lead-zinc ores of the Slocan, and the Sullivan ore body, the largest silver-lead-zinc mine in the world. Other mineral deposits include coal which occurs in the Rocky mountains and on Vancouver island in beds of Cretaceous and also of Tertiary age, iron ores on Vancouver and Queen Charlotte islands, placer gold in Yukon and in the Cariboo country in gravels of Tertiary age, and numerous other mineral occurrences.

Section 2.—Economic Geology.

An article on this subject, prepared by F. J. Alcock, Ph.D., Mines and Geology Branch, Department of Mines and Resources, Ottawa, appeared at pp. 16-28 of the 1937 Year Book.

PART III.—SEISMOLOGY IN CANADA.*

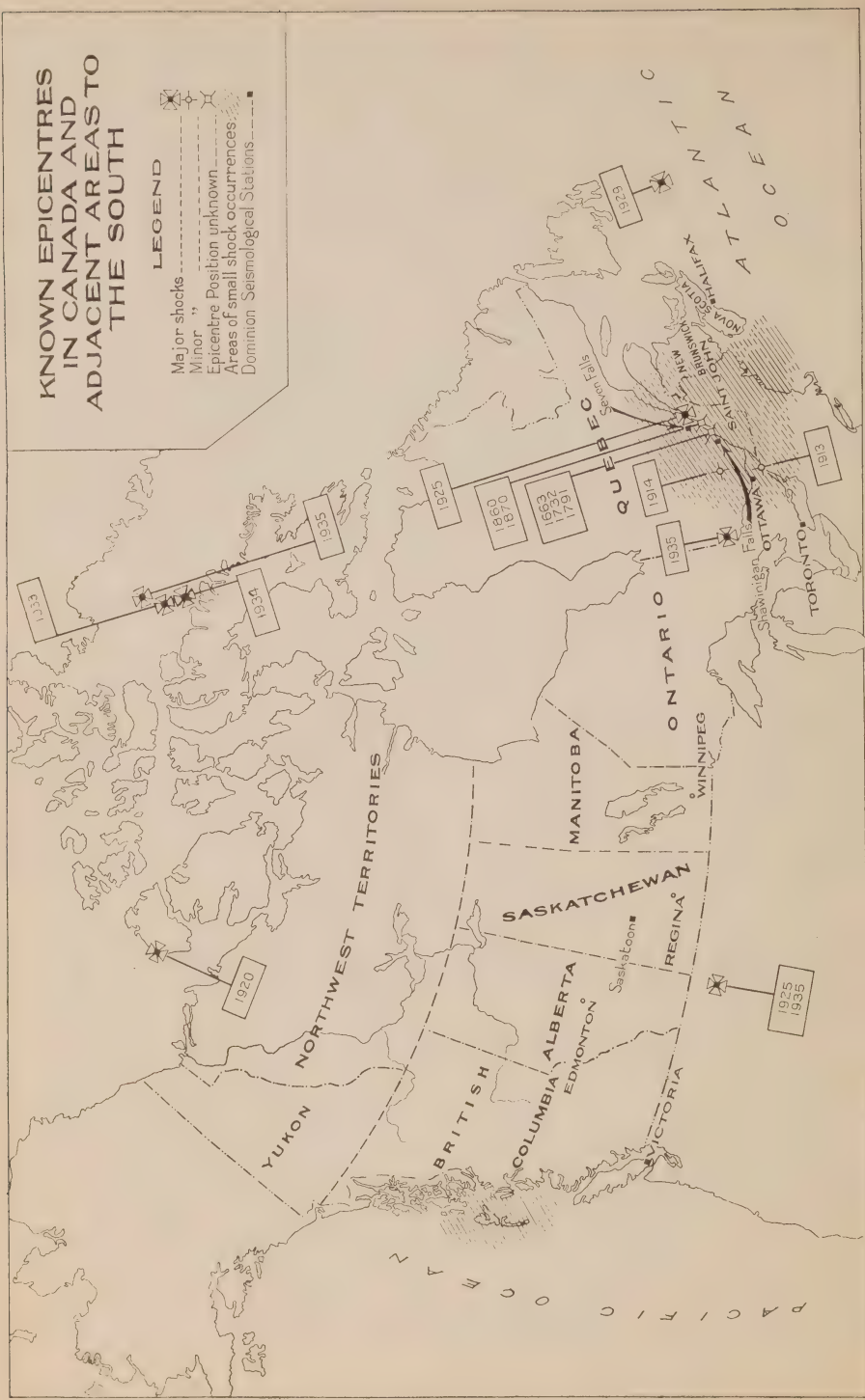
Seismology—that branch of science which treats of earthquakes—has received considerable attention in Canada during recent years. It has been generally recognized that earthquakes are frequent in regions of adjustment of strata and are characteristic of the newer mountain and coast regions where steep level-gradients occur. The energy radiated from an earthquake in the form of elastic waves in the earth is, however, recorded on sensitive seismographs up to great distances, even to the antipodes of the earthquake. Seismological researches, while regularly recording the routine statistical data regarding earthquakes, seek also to determine particular causes. Moreover, they endeavour to ascertain the physical properties

* Prepared under the direction of R. Meldrum Stewart, Director, Dominion Observatory, Department of Mines and Resources, by Ernest A. Hodgson, Ph.D.

KNOWN EPICENTRES IN CANADA AND ADJACENT AREAS TO THE SOUTH

LEGEND

- Major shocks
- Minor "
- Epicentre Position unknown
- Areas of small shock occurrences
- Dominion Seismological Stations



of the earth's crust and interior as revealed by the peculiarities in the *time-distance* curves for earthquakes.

A time-distance curve, as its name implies, shows the relation between the arcual, surface distances from the origin of the earthquake to the various recording stations and the elapsed time required for the initial impulses and their various reflections to reach each station from the origin concerned. Of late years, these time-distance curves have been greatly improved. It may be said that their further improvement must be through taking account of the depth of the origin—the *focal depth*. The point within the earth from which the energy of an earthquake is liberated is called the *focus*; the point vertically above the focus, on the surface, the *epicentre*.

The records of seismographs within five hundred miles of an earthquake are used to determine the epicentre, focal depth, and focal time. These same stations, together with the others at distances up to the antipodes of an earthquake, are used to determine arrival times for making up the time-distance curves. The curves themselves are the point of departure for the earth's crust and deep interior.

Previous to the beginning of the present century, seismological records for Canada are mostly to be found in historical documents. Such are our only reports of a great earthquake which disturbed Eastern Canada from above Montreal to below Quebec during the first part of the year 1663. Other earthquakes in Eastern Canada, for which similar records alone are available, occurred in 1732, 1791, 1860, and 1870. In 1925 another earthquake took place in the same region. It was the subject of careful study by the seismological division of the Dominion Observatory and several reports were published. Another, on Nov. 1, 1935, which occurred near Timiskaming, Que., was also carefully studied. It is known that the earthquakes of 1925 and 1935 were felt over wide areas. The former was reported from Duluth to Halifax and from the Arctic to the Carolinas. The latter was felt even farther west and as far south as Virginia. Many smaller earthquakes are experienced in Eastern Canada from time to time. Those previous to 1906 are listed from historical records. The subsequent ones have been recorded on seismographs.

The only other regions of Canada where earthquakes are sometimes experienced are British Columbia and the Arctic. The earthquakes in the west have been mostly centered near the Queen Charlotte islands and, within the brief span during which records are available, none has been severe. A severe earthquake occurred off Banks island in the Arctic in 1920 and three of great intensity have since been centred in Baffin bay. The first of these occurred on Nov. 20, 1933. It is suspected that many small shocks, recorded on seismographs in Canada, originate in the almost uninhabited regions of the north but this has not, as yet, been established.

Previous to Dec. 1, 1936, two government departments carried on seismological investigations in Canada. Seismological stations were established at Toronto (1897), and at Victoria (1898), each under the auspices of the Meteorological Service. Stations at Ottawa (1905), Halifax (1915), Saskatoon (1915), Shawinigan Falls (1927), and Seven Falls (1927) were established by the Dominion Observatory. The stations at Halifax and at Saskatoon are maintained, respectively, with the co-operation of Dalhousie University and the University of Saskatchewan. The stations at Shawinigan Falls and at Seven Falls are maintained with the co-operation of the Shawinigan Water and Power Company. On Dec. 1, 1936, the Toronto and Victoria stations were taken over by the Dominion Observatory which now has charge of all seismological work—routine and research—being carried on.

The seismographs employed have been improved greatly since the first world chain of stations was established in 1896 by John Milne under the auspices of the British Association for the Advancement of Science. The instruments now used in Canada are Milne-Shaw, Wood-Anderson, and Mainka horizontals; Wiechert, and Benioff verticals. It is planned to modify the Mainka and Wiechert instruments for photographic recording, and electro-magnetic damping; the others are already of that type.

Seismological instruments have been modified for recording the earth tremors sent out by explosives detonated for the purpose of studying the earth structure near the surface (to a depth of about two miles). A technique has been developed for making use of this equipment to trace sub-surface contours. Such information is useful in locating oil deposits and, to a lesser degree, fault zones in which minerals may be found. Some work of this nature has been done in Canada, but only by trained groups of operators hired from companies outside Canada. In some cases the Dominion Observatory has been represented by an observer attached to the group. The officers of that institution endeavour to keep themselves posted as to the developments in this important application of seismology but, as yet, no work of this kind has been developed in Canada.

The Seismological Service of Canada, as now organized, has its central station at Ottawa. The records are developed at the auxiliary stations and sent to Ottawa for reading and the publication of reports. Seismological research is carried on at the Dominion Observatory and international co-operation in seismological work is there arranged.

PART IV.—THE FLORA OF CANADA.*

NOTE.—Bibliographical references are indicated by arabic numerals and run consecutively throughout the article; corresponding notes are listed in the Bibliography at the end, pp. 56 to 59. Textual foot-notes to individual pages are indicated by symbols.

The Dominion of Canada extends from Pelee island in lake Erie, a little south of latitude 42°, to the northern end of Ellesmere island in latitude 83°, that is, a distance in a north and south direction of about 2,800 miles. In an east and west direction, the distance from the Atlantic to the Pacific ocean is about 3,000 miles. In a country of such great extent there are naturally wide variations of climate such as the mild, equable, ocean climate of Vancouver island and the southwestern mainland, the warm, temperate climate of the lake Erie region, the dry, interior continental climate with wide extremes of heat and cold of the central prairie regions, and the rigours of the Arctic islands, to mention only a few outstanding variations. As might be expected, the range of flora in such a country is very wide and in the present age of specialized studies it would hardly be possible for one writer to do justice even to the highest group, namely, the seed-plants. If, in addition, cognizance is taken of the various groups of cryptogams—the mosses, fungi, etc.—it will be realized that all that can reasonably be attempted in an article such as this is a summary of some of the more important botanical features of different regions and an indication of what has been accomplished in regard to the study of the distribution in Canada of the various subdivisions of the plant kingdom. Any attempt to explain the origin of the various floral groups in Canada with reference to changes in geological time and to correlate their affinities with the plants of other countries (more particularly with those of the United States, Eastern Siberia, and Arctic Europe) would require specialized knowledge of each group and a much more intensive study of their local and general distribution than has hitherto been achieved.

* Prepared by John Adams, M.A. (Cantab.), Division of Botany, Experimental Farm, Ottawa.

Previous Descriptive Works on Canadian Flora.—The earliest descriptive work on the flora of Canada is that of J. P. Cornuti entitled "*Canadensium Plantarum Historia*", published at Paris in 1635.¹ It is written in Latin and contains a considerable number of figures of the species, many of which, such as *Adiantum pedatum*, *Asarum canadense*, etc., can be recognized readily although the names may be different. It includes, in addition, some species which are not indigenous. As might be expected from the date of publication, definite localities in this country are not specified.

At a much later date (1862) appeared Abbé L. Provancher's "*Flore Canadienne*",² written in French and also containing a number of illustrations. In addition to the native flora, it included descriptions of many plants cultivated in gardens as well as some species of the lower cryptogams, namely, mosses, lichens, fungi, and algæ. But Canada, in the sense used by Provancher, was mostly synonymous with the present provinces of Quebec and Ontario. More recent manuals devoted mainly to the description of the species mentioned, rather than their detailed distribution in Canada, are those by Marie-Victorin,³ Spotton, Cosens, and Ivey,⁴ Hales,⁵ Brown and Schäffer,⁶ and Henry.⁷ The forest trees have been dealt with in an adequate manner by Morton and Lewis.⁸

The first and only work to show the detailed distribution of the native plants throughout the Dominion was John Macoun's "*Catalogue of Canadian Plants*"⁹ published in seven parts at intervals between the years 1883 and 1902. It comprised all groups of the plant kingdom with the exceptions of fungi and algæ. Other sectional lists dealing with a part or the whole of a particular province have appeared from time to time and are referred to in the proper places under their respective floral regions. But for a list of all the important papers on the distribution of Canadian plants published between the years 1635 and 1935, inclusive, reference should be made to the "*Bibliography of Canadian Plant Geography*".¹⁰

FACTORS AFFECTING PLANT LIFE.

Climate.

A full general account of the climate of Canada will be found in Koeppé's work¹¹ on the subject. The maps prepared by Brooks, Connor, and others¹² are also very instructive, while the meteorological reports¹³ form the basis of practically all our knowledge of the subject apart from observations made by explorers. The relation of plants to climatic factors has been dealt with to some extent by Adams¹⁴ and much more fully by Livingston and Shreve.¹⁵ The adaptations of many plants in the Arctic Region to the difficulties of the climate under which they live are briefly described later on in this article at p. 40, while characteristics which aid other plants to withstand arid conditions in certain sections of the prairies are mentioned on pp. 47 and 48.

The study of plants in relation to climate involves consideration of a number of different factors such as temperature, rainfall, snowfall, evaporation, light, wind, humidity, and fog.

Temperature.—For a plant to function properly, a certain range of temperature is necessary. If the temperature is too low the plant may become dormant or may suffer temporary injury or may even be killed. Plants, however, vary greatly in their resistance to cold. As a result of this, the assemblage of species in a northern latitude may be entirely different from that in a region nearer the equator with the production of distinct floral areas. The method usually attempted of

measuring the effect of temperature on plant life is that of recording daily the maximum and minimum. For comparison of different localities a fairly correct idea can be obtained from the mean temperature of the air during the hottest and coldest months, usually July and January, together with the absolute minimum reached during the year. These observations should be supplemented by the minimum temperature of the soil at different depths, but such figures are very rarely obtainable.

Precipitation.—In the absence of water, plant life would cease to exist. Hence rainfall and its frequency are very important factors and both are easily measured. The total rainfall during the chief growing months, that is, from June to September, furnishes a useful basis for comparison of different areas, but rainfall figures alone lose much of their value unless supplemented by the amount of evaporation for which, unfortunately, few records exist. Evaporation from a water surface is, in fact, an index of the combined effect of four other factors, namely, temperature, bright sunshine, wind, and humidity of the air.

Figures of total snowfall are useful, mainly, as providing a basis for estimating the amount of moisture likely to be added to the soil when the snow melts in spring. A snow cover also protects the roots of the plants against excessive minimum temperatures.

Light.—Light varies greatly at different points on the earth's surface, not only in its duration but also in its intensity. During the summer months the duration of daylight in northern latitudes is much greater than in places farther south and, even though the temperature in the former localities may be lower, this is compensated for to a considerable degree in the plant's economy by the longer exposure to light. The same is true of light conditions on the summit of a mountain as compared with the valley at its base, and partly explains why arctic plants occurring at low altitudes above the sea are also often found in alpine situations much farther south. The following examples taken at different latitudes will show how the average duration of diffuse daylight (as distinct from hours of bright sunshine) varies in different localities during the month of June: Fort Vermilion (lat. $58^{\circ} 23'$) 18.2 hours; Prince George (lat. $53^{\circ} 50'$) 16.7 hours; Swift Current (lat. $50^{\circ} 20'$) 16.3 hours; Annapolis Royal (lat. $44^{\circ} 45'$) 15.7 hours; Harrow (lat. $42^{\circ} 02'$) 15 hours.

As there is no simple or easy method of summing up the total daily light factor, the total hours of bright sunshine during the six growing months may serve to some extent to institute a comparison between different places. In this connection the data on the duration of daylight, given in the section on Meteorology at pp. 66 to 68, for places situated between latitudes 44° N. and 52° N., are of importance.

Wind.—Wind is important chiefly in promoting pollination of flowers so that seeds may be set; it also serves for the dispersal of many seeds and fruits over a wider area. Wind promotes evaporation of water from the surface of the soil but, as in the case of air humidity and of fog, it is seldom of more than local importance in the comparison of floral areas.

Altitude.—Altitude above the sea-level has a marked effect on climate and as a consequence on vegetation. Temperature falls about 1° F. for every 300 feet of ascent, while precipitation increases with altitude, taking the form of snow at higher levels. The duration of daylight also increases with altitude and the intensity of the wind is also greater. Owing to the difference in exposure to the sun's rays on

the northern and southern slopes of a mountain, the vegetation at the same level is markedly different. The orographical map facing p. 10 indicates those regions in Canada (confined principally to the western Cordillera, to Gaspe, to the eastern coast of Labrador, and to the Arctic islands) where altitudes are sufficiently great to materially affect vegetation.

Environment.

No very definite line can be drawn between the influences of climate and environment, since climate itself may be the cause of peculiar environmental conditions. Similarly latitude, geology, topography, and altitude all have their effect upon the conditions of vegetation. All these factors cannot be discussed here, but some mention should be made of instances in which certain plants exhibit special characteristics in relation to their environment, such as parasitic plants, climbing plants, water plants, etc. Groups characterized by these peculiar adaptations are discussed briefly below under ecological relationships.

In the course of the agricultural settlement of Canada and the development of trade with other parts of the world during the past three centuries, many forms of plant life not originally present in Canada have been introduced either intentionally or accidentally, and many of these forms have been able to so adapt themselves to conditions in various parts of this country that they have become established under natural conditions of reproduction. Such plants are briefly treated on pp. 34 and 35, under exotic flora.

Ecologic Relationships and Groups.*—Any account of the Canadian flora which did not contain a brief description of those groups of plants which stand in a peculiar relationship to environmental conditions would be lacking in completeness. Such ecologic relationships are commonly considered to include: plants which, while attaching themselves to other plants, actually obtain their nourishment from the air (these are called epiphytes); parasitic and partially parasitic plants, which derive nourishment from the roots or stems of other plants; carnivorous plants; which trap and absorb insects or small aquatic animals; climbing plants; water plants; salt-loving plants; etc. With the exception of epiphytes, most of these groups contain a considerable number of representatives in our flora.

Hemiparasites are exemplified by several species of Dwarf Mistletoe (*Arceuthobium*) found growing on the branches of coniferous trees. Others in this group, such as *Castilleja* and *Pedicularis*, attach themselves to the roots of other plants.

Total parasites with no green colouring matter are exemplified by Dodder (*Cuscuta*) and the family *Orobanchaceae* with 5 Canadian genera.

Saprophytes likewise contain little or no chlorophyll and occur in some genera of *Orchidaceae*, such as Coral-root (*Corallorrhiza*), and 5 genera of *Monotropaceae*. In this last family the Indian Pipe (*Monotropa uniflora*) is the best known.

Three genera of carnivorous plants, namely, *Drosera*, *Pinguicula*, and *Sarracenia*, have leaves adapted for the capture of insects, while *Utricularia* has bladder-like organs in which minute aquatic animals are trapped.

Representatives of climbing plants occur in 23 genera. A variety of Poison Ivy (*Rhus Toxicodendron*) climbs by means of rootlets developed on the woody stem, while species of *Galium* scramble over other vegetation by means of hooks. Tendril-climbers occur in 4 families represented by *Smilax*, *Vicia*, *Vitis*, *Echinocystis*, and 3 other genera, while leaf-climbers are exemplified by *Adlumia*.

* For an explanation of the classification and naming of the species mentioned in connection with these groups, see the part of this article dealing with "Classification of Flora", pp. 35 to 37.

There are a considerable number of herbaceous twiners, such as *Dioscorea* and *Ipomoea*, while woody twiners or lianes are exemplified by *Celastrus*, *Menispermum*, and some species of *Lonicera*.

Water-plants are well represented in the Canadian flora, as might be expected in a country with so many rivers and lakes of all sizes. The adaptations shown by water-plants to the surrounding medium are very varied in the different species, but one of the most characteristic features is the occurrence of air-spaces throughout all parts of the plant. These serve not only to give buoyancy to the stem and leaves, but also serve for the passage of gases throughout the tissues. A full discussion of the various adaptations will be found in the survey by the present author.¹⁶ While it is difficult in some cases to draw the line between typical water-plants and swamp-plants, it is safe to say that there are 40 genera containing representatives of this group. Some of these, such as *Lemna*, *Callitriche*, and *Hippuris*, have a very wide distribution throughout the world. Among the more interesting members of this group are: *Wolffia*, one of the tiniest seed-plants known; *Phyllospadix*, growing in the sea on the Pacific coast; *Podostemon*, the only representative in Canada of a peculiar group of plants found attached to stones in running water; the Pickerel-weed (*Pontederia cordata*); the Water-shield (*Brasenia Schreberi*), and the American Lotus (*Nelumbo lutea*), both of which belong to the Waterlily family.

Spiny or prickly plants are probably adapted to defend themselves against browsing animals. They are represented by 2 genera of the Cactus family, namely *Mammillaria* and *Opuntia*, by various species of *Ribes*, also by Prickly Ash (*Xanthoxylum americanum*), Devil's Club (*Echinopanax horridum*), and others. Presumably belonging to the same ecologic group are plants with stinging hairs, such as *Laportea* and *Urtica*.

Halophytes or salt-loving plants are well represented in the Canadian flora. Some of the most striking examples are the Sea Lungwort (*Mertensia maritima*) and the Sea Lavender (*Limonium carolinianum*) found only on the Atlantic coast, while Scottish Lovage (*Ligusticum scoticum*), Beach Pea (*Lathyrus maritimus*), and Sea Ragwort (*Senecio Pseudo-Arnica*) occur on both the Atlantic and Pacific coasts. Some species, such as Lyme-grass (*Elymus arenarius*), Beach-grass (*Ammophila arenaria*) and Sea Rocket (*Cakile edentula*), are restricted to areas of drifted sand, while others, such as Sea Arrow-grass (*Triglochin maritima*) and Salt-grass (*Distichlis spicata*) are partial to the salt marsh.

It is worthy of note that a considerable number of plants belonging to this group, such as Beach Pea, Rocket, Beach-grass, and Knotweed Spurge (*Euphorbia polygonifolia*), also occur on the shores of the Great Lakes, indicating that those bodies of water were formerly connected with the sea. Other salt-loving plants, such as Sea Arrow-grass, Salt-grass, Sea Milkwort (*Glaux maritima*) and species of *Salicornia* and *Plantago*, occur also on saline soil in the Prairie Provinces.

A much fuller account of the relation of the above groups to environmental conditions, as well as methods of dispersal of seeds and fruits by wind and animals will be found in the "Survey"¹⁶ by the author.

Exotic Flora.*—In addition to the native or indigenous flora many other species have from time to time found their way into this country. Some of these have evidently come to stay and have proved themselves to be much more aggressive in their demand for elbow room than the indigenous species. Others may persist for a few years and then disappear. The majority have probably been

* See footnote, p. 33.

introduced accidentally, but some, more particularly those cultivated for their beauty or belonging to the class of garden herbs, such as Caraway, Catnip, Tansy, etc., have been brought in by immigrants from various countries. These frequently escape in the vicinity of towns where garden refuse containing living roots or seeds has been thrown on dump heaps. Some doubtless came in by way of imported feeding materials such as hay or bird seed. But much the most important method of introduction was in the form of impurities in imported farm seeds.

Of the introduced species comparatively few are shrubs, such as Barberry, Buckthorn, etc. Most of these have fleshy fruits which are eaten by birds and in this way the seeds become distributed. Of the herbaceous species, the majority are annual plants with a special liking for cultivated ground, as every farmer and gardener knows by experience. Familiar examples are Wild Mustard, Goosefoot, Purslane, Groundsel, etc. The little Pineapple Weed (*Matricaria suaveolens*) is found from Cape Breton island to the Queen Charlotte islands. Others are biennial in nature, such as Great Mullein and Burdock. Many are perennial and are found on waste ground, roadsides, and pastures. Some of the most noxious weeds are in this class, such as Couch Grass, Docks, Field Bindweed, Ox-eye Daisy, Creeping Thistle, etc. One would not expect to find many plants whose original home was in a warmer climate maintaining themselves in this country, but there are some, such as Carpet Weed (*Mollugo verticillata*) and *Galinsoga ciliata*, the latter of which is a native of tropical America. Both are annuals and they are able to complete their life history here during the growing season.

There are even some aquatic plants among the immigrants, such as Flowering Rush (*Butomus umbellatus*), a species with pretty flowers which is spreading along the Ottawa and St. Lawrence rivers.

As might be expected, the larger numbers of introduced species are to be found in those families a considerable number of whose members are cultivated for use or ornament. These are as follows, with the number of exotic species belonging to each: *Compositae* 92; *Gramineae* 72; *Cruciferae* 53; *Leguminosae* 40; *Labiatae* 29; *Caryophyllaceae* 29; *Rosaceae* 28; *Scrophulariaceae* 23; *Umbelliferae* 17; *Polygonaceae* 17. Altogether about 600 exotic species which were not planted intentionally in their present habitats by human agency have been recorded as occurring in this country.

Further information on this subject will be found in Ada Georgia's "Manual of Weeds",¹⁷ and in various local floral lists.

CLASSIFICATION OF FLORA.

Before proceeding to review the various plant groups found in Canada, it may be desirable to explain briefly the basis upon which plants are classified and named in this article. Individuals, whether of the higher or lower forms of plant life, that resemble each other in their structural characteristics are grouped together under the term species; species which exhibit one or more similar characteristics are further grouped under a genus; and genera are similarly grouped in a family. The names of all these plant classifications are in Latin, which is still to a large extent internationally used by scientists. A species of plant of any group is always identified by a double Latin name, such as the Wild Plum (*Prunus nigra*), the Sand Cherry (*Prunus pumila*), or the Pin Cherry (*Prunus pennsylvanica*): the second word is the name of the species, while the first is that of the genus. In this respect, plant names resemble personal names, except that the genus name, corresponding to the

surname, comes first. Family names mostly end in the termination—*aceae*. Families in their turn are grouped into still larger subdivisions of the vegetable kingdom.

A popular arrangement of the vegetable kingdom is that which divides all plant forms into phanerogams or cryptogams, the former being characterized by the possession of seeds, while the cryptogams have no seeds, but are propagated by minute or microscopic bodies known as spores.

Phanerogams.—The phanerogams are divided into: (1) gymnosperms in which the seeds, instead of occurring in a closed receptacle, are found without any covering or merely placed between the scales of the cone; and (2) angiosperms in which the seeds are contained in a closed structure which later becomes the fruit. The gymnosperms, moreover, are all shrubs or trees, while the majority of angiosperms are herbaceous. The latter group is further subdivided into monocotyledons and dicotyledons. In the monocotyledons the leaves are usually much longer than broad, with parallel veins, and the vast majority of the group are herbaceous, while the dicotyledons have net-veined leaves and a considerable number of species are shrubs or trees. Further subdivisions of these groups carry the classification down to families, genera, and species.

Cryptogams.—The cryptogams, according to popular rather than strictly scientific usage, may be considered as consisting of six groups: vascular cryptogams, mosses, liverworts, lichens, fungi, and algæ. The vascular cryptogams have a lignified or woody supporting tissue which serves at the same time to conduct the sap. In common with the two next lower groups—the mosses and liverworts—they exhibit in their life-history an “alternation of generations”, that is, a sexual followed by an asexual generation. The mature plant in the vascular cryptogams is the asexual stage. This group has three leading subdivisions—the ferns, horse-tails (*Equisetum*), and club-mosses (*Lycopodium*, etc.).

In the mosses and liverworts the mature plant is the sexual generation. They are generally lowly plants occurring mostly on damp soil or in shady places. Lignified or woody tissue is almost entirely absent. The mosses are leafy plants with only a single mid-vein in the leaf except in the genus *Sphagnum* which has none. In the liverworts two types occur, namely: (1) the thalloid type in which there is no differentiation into stem and leaf, and (2) the leafy type in which the leaves occur in two rows on the stem and are devoid of a mid-vein.

The lichens are a combination of the two lowest groups of plants and consist of a fungus and an alga living together for their mutual benefit. They are mostly greyish in colour but sometimes orange, sometimes black. They occur on rocks, or the bark of trees, or sometimes on the surface of the ground and exhibit three leading forms—the crustaceous, the foliose or leafy, and the fruticose or shrub-like.

The most characteristic feature of fungi is the absence of the green colouring matter (chlorophyll) so characteristic of most groups of plants. In consequence they are not truly self-supporting but must derive their food materials from the decaying remains of other plants or animals, in which case they are known as saprophytes, or else they attach themselves to the bodies of other plants (rarely animals) as parasites, the plant attacked being known as the host. There are three main groups of fungi, namely, *Phycomycetes*, *Ascomycetes* (including such forms as blue mould and morels), and *Basidiomycetes* (including mushrooms, polypores, puffballs, etc.). Under the last group are usually included the rusts (*Uredineae*), while the *Pyrenomycetes* are a sub-group of *Ascomycetes*. Two other groups of

plants are sometimes classified under fungi, namely, bacteria which contain the smallest living organisms and slime fungi (*Myxomycetes*) which are sometimes considered as belonging to the animal kingdom.

The algæ, almost without exception, occur in water, some being confined to fresh water, others occurring only in the sea. They vary greatly in size, some, such as diatoms and desmids, being one-celled microscopic bodies, while others are several yards in length. Chlorophyll is usually present but in many the green colour is masked by some other pigment. The colour-groups usually recognized are the blue-green (*Cyanophyceae*), green (*Chlorophyceae*), brown (*Phaeophyceae*), and red (*Rhodophyceae*). The *Diatomaceae*, which are sometimes classified among algæ, are of a golden colour, have a flinty covering composed of silica and are found, some in fresh, others in salt water. Both the blue-green and the green algæ have likewise species characteristic of each medium. But the *Desmidiaceae* and allied species as well as the Stoneworts (*Characeae*) occur exclusively in fresh water. Both the *Phaeophyceae* and the *Rhodophyceae* occur exclusively in the sea, with the exception of 3 genera in the latter group.

Section 1.—Phanerogams.

In the 11th edition of Engler and Diels' "Syllabus der Pflanzenfamilien",¹⁸ there are described 314 families of flowering plants (angiosperms). On the same basis of classification, besides 3 families of gymnosperms, there are 124 families of indigenous angiosperms in Canada, but some of these, such as *Dioscoreaceae*, *Acanthaceae*, *Bignoniaceae*, and *Melastomataceae*, whose chief centres of distribution are in much warmer climates, are represented in this country by a single species only.

There are in Canada about 700 genera of indigenous phanerogams of which 10 belong to the group of gymnosperms, and 690 to the angiosperms of which 142 genera are monocotyledons and 548 dicotyledons. It is more difficult to reckon up the number of species owing to the divergence of opinion on the definition of this term. If, however, we employ the term 'species' in the wider Linnaean sense, there are about 35 species of gymnosperms and 4,112 species of angiosperms. About one-fourth of the latter are monocotyledons and the remainder dicotyledons. In the dicotyledonous group, about 346 species are shrubs or trees.

The largest family, as might be expected, is *Compositae* with 630 species, while *Cyperaceae* and *Gramineae* come next each with 352 species. Next in point of numbers come *Rosaceae* with 283 species, *Leguminosae* with 189 species, *Cruciferae* with 152 species, and *Scrophulariaceae* with 151 species.

The largest genus in the Canadian flora is *Carex* with 285 species followed by *Salix* with 96 species. Seven other genera contain over 50 species. These, in order of numerical importance, are *Aster*, *Potentilla*, *Saxifraga*, *Ranunculus*, *Solidago*, *Poa*, and *Polygonum*. There are 7 genera with 40 to 50 species each, and 26 genera with 20 to 40 species each. An estimate of the number of species in each genus will be found in the author's "Guide to the Genera".¹⁹

In the study of phanerogams, under the diverse conditions of plant life existing in a country so extensive as Canada, it is convenient and necessary to divide the country into various regions or zones, each of which, because of circumstances of climate, latitude or topography, tends to exhibit a flora characteristic of that region and differing in important aspects from that of other regions.

Floral Regions.—Considerable difference of opinion exists among botanists on the subject of the division of Canada and the United States into natural vegetational areas. Only four of the proposed schemes will be considered here.

So far as it applies to Canada, the scheme proposed by Merriam²⁰ consists of six zones, three of which, namely, Arctic, Hudsonian, and Canadian, are transcontinental. Next in order from north to south come the Transition Zone including the true prairie and then the Alleghanian Zone comprising part of southern Manitoba, part of southern Ontario, and parts of New Brunswick and Nova Scotia bordering on the bay of Fundy. The sixth zone, the Carolinian, includes the region in southern Ontario south of a line drawn from Hamilton to Sarnia.

Basing his subdivisions on the distribution of trees, Sargent²¹ recognizes only three areas in Canada south of the Arctic Region. The North Eastern section includes the area east of a line from Wood mountain in Saskatchewan to the mouth of the Mackenzie river. The Rocky Mountains section includes a broad belt on each side of this chain, while the North Western section comprises the Selkirk mountains and the western half of British Columbia and Yukon.

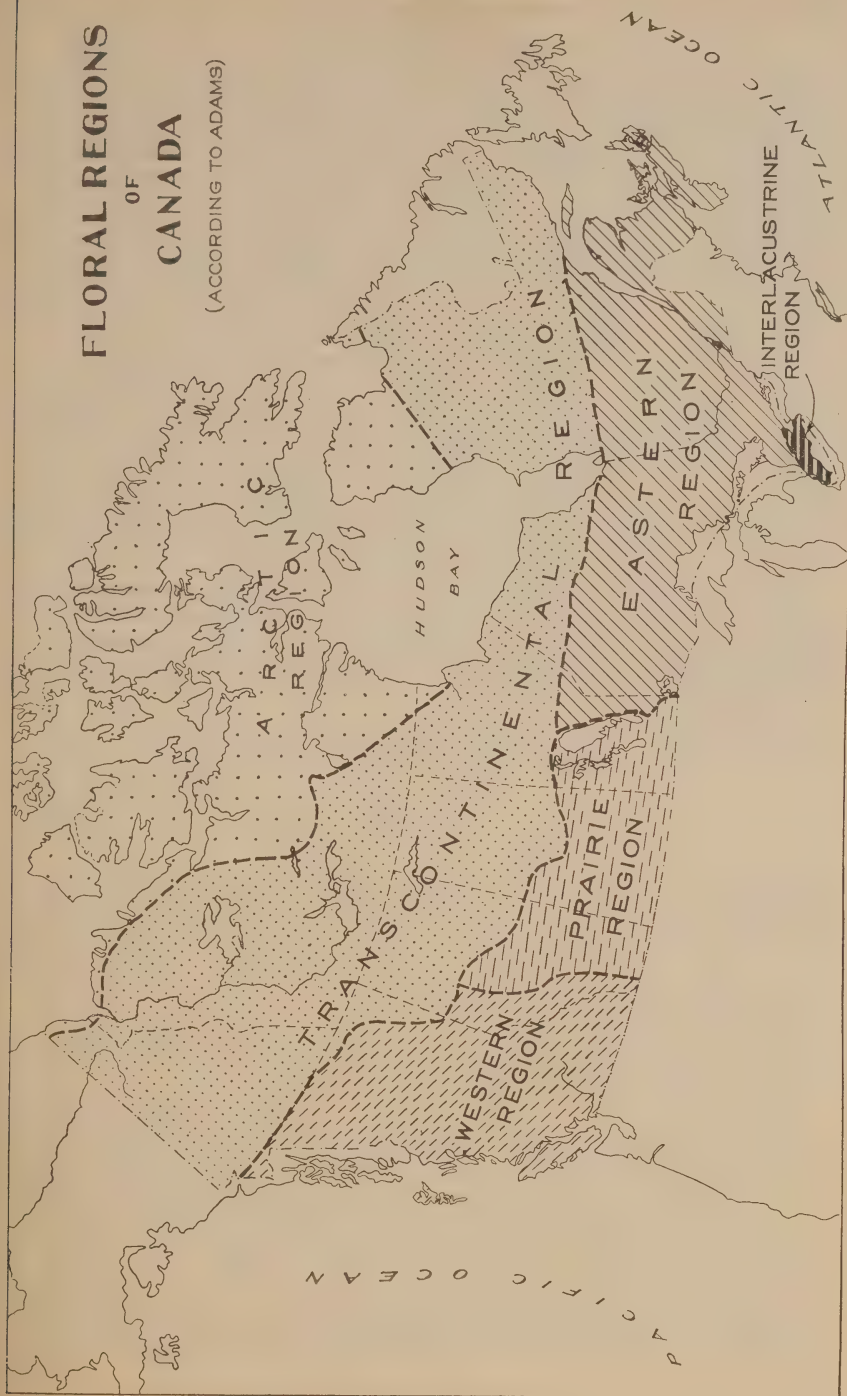
Harshberger²² recognizes seven phytogeographic areas in Canada. These are: (1) Arctic Zone; (2) Subarctic or Northern Coniferous Forest Zone; (3) St. Lawrence-Great Lake Region, which extends as far west as lake Winnipeg; (4) Prairie Region; (5) Rocky Mountain Region, extending to the northern boundary of British Columbia; (6) Sitkan Region, comprising the northwestern coastal temperate zone extending from Cook inlet to the fifty-first parallel and including the northern part of Vancouver island; (7) Columbian Region, extending in Canada from about the bend of the Fraser river to the International Boundary. Most of the above regions are subdivided further into smaller areas.

Macoun and Malte²³ in their review of the flora of Canada divide the country into the following eleven vegetational areas: Arctic Zone; Subarctic Forest Zone; Hardwood Forest Zone; Carolinian Zone; Prairie (with three subdivisions); Rocky Mountain Foothills; Rocky Mountains Proper; Selkirk Range; Coast Range; Vancouver Island; and Dry Belts of British Columbia. In this scheme the Subarctic Forest Zone included the Hudsonian and part of the Canadian Zone of Merriam, while the Prairie was approximately the same as Merriam's Transition Zone.

In the present delimitation of the boundaries of the floral regions, which is almost the same as that previously proposed by the present author,¹⁶ Canada has been divided into six regions: Arctic; Transcontinental; Eastern; Interlacustrine or Carolinian; Prairie; and Western. Several of these, particularly the Western, can be divided into smaller areas each with a distinctive flora. The boundaries of these six regions are shown on the accompanying map. As there is a certain amount of overlapping of the floras of any two regions where they meet, the above boundaries are not to be interpreted too rigidly. Characteristic features of each of the floral regions are given under the respective centre headings below. The distribution of seed-bearing plants in Canada is discussed in some detail under these six regions; for each, a brief outline is given of characteristic factors of climate or physiography which are likely to exercise a controlling influence upon the plant life within that region.

FLORAL REGIONS OF CANADA

(ACCORDING TO ADAMS)



Arctic Region.

This is regarded by general consent as including the treeless region along the northern mainland of Canada usually known as the "Arctic Prairies", together with the numerous islands forming the archipelago still farther north. One of the most outstanding climatic features of this region is the shortness of the season in summer during which the temperature is sufficiently high for the activity of plant life. But, although the mean temperature of the summer months remains comparatively low, a compensating factor is the prolonged period of daylight. North of the Arctic Circle there are a considerable number of days during which the sun never goes below the horizon. Even at Fort Rae in latitude $62^{\circ} 40'$ the average daily duration of daylight is 19.8 hours in June and 18.9 hours during July.

Another feature of this region, important in its bearing on plant life, is the fact that the lower layers of the soil remain permanently frozen and only a few feet on the surface thaw out in summer. Thus, as an example, along the northern edge of the Transcontinental Region, according to figures quoted by Koeppe,¹¹ at Fort McPherson near the mouth of the Mackenzie river the frost penetrates to a depth of 52 feet and the ground on the surface thaws to a depth of only 3.5 feet, while at York Factory near the mouth of the Nelson river on Hudson bay the ground freezes to a depth of 19.8 feet and thaws out to a depth of 2.3 feet.

As an indication of the climatic conditions of temperature and precipitation likely to govern plant life in the Arctic Region, meteorological data are given below for three representative places. Unfortunately data on sunlight are not available. The records summarized here cover only 3 years in the cases of Coppermine and Pangnirtung and 5 years at Chesterfield.

METEOROLOGICAL RECORDS IN THE ARCTIC REGION.

Place.	Absolute Minimum Range.	Mean Temperature.		Average Rain, June to Sept.
		January.	July.	
	°F.	°F.	°F.	in.
Coppermine.....	-54 to -42	-23.4	52.0	3.86
Chesterfield.....	-60 to -47	-26.6	48.0	6.96
Pangnirtung.....	-46 to -38	-17.8	46.5	6.33

For a much fuller discussion of the climate of this region, reference should be made to Koeppe's work¹¹ already mentioned.

The vegetative characters of the Arctic Zone have been frequently described^{16,23} but nowhere better than by Porsild,²⁴ who writes as follows:—

Among the herbs of the Arctic Zone there are no climbing plants, none that are poisonous, nor any that are protected by spines or thorns. Very few are annuals and as a general rule Arctic plants of all species depend only to a limited extent for their propagation upon seed, protecting themselves against unfavourable seasons by various means of vegetative reproduction. One of these means is wintering buds which are not buried in the soil, but are situated close to the surface and are well protected by withered leaves. Most of the herbs are caespitose with numerous leafy shoots, forming dense cushions or rosettes. In most species a profuse branching is the rule.

To this description might be added the viviparous condition where a small vegetative bulb-like growth takes the place of a flower, as in *Polygonum viviparum*. An example of the annual type of plant is furnished by *Gentiana arctophila*.

Woody plants are exemplified by dwarf shrubs of various kinds whose low stature is doubtless due mainly to harsh climatic conditions, such as cold soil, strong winds, etc. Some of these, such as *Diapensia lapponica*, exhibit the cushion-like type of growth found in herbs; others, such as *Empetrum nigrum*, have a trailing habit of growth. In *Loiseleuria procumbens* the leaves have a leathery texture, while in *Salix glauca* the leaves are covered by a waxy deposit to diminish transpiration.

The families best represented as regards number of species are *Gramineae*, *Cyperaceae*, *Compositae*, *Cruciferae*, *Caryophyllaceae*, *Saxifragaceae*, and *Ranunculaceae*.

There are 5 genera, namely, *Bartsia*, *Chrysanthemum*, *Eutrema*, *Lagotis*, and *Parrya*, which do not appear to be represented in Canada outside the Arctic Region.

Many species of Arctic plants occur also on the summits of mountains farther south where the climatic conditions are somewhat similar, but so far as is known at present there are about 120 species not found south of the Canadian Arctic Zone.

In spite of the comparative inaccessibility of the greater part of the Arctic Region, that territory has received a good deal of attention from botanical investigators. The most complete account of the flora is to be found in the work of Simmons²⁵ who records 8 species of ferns and their allies, 59 species of monocotyledons, and 137 species of dicotyledons. The report of Macoun and Holm²⁶ on the results of the Canadian Arctic Expedition, 1913-18, includes 230 species of vascular plants, while a recent report by Gröntved,²⁷ dealing with the 5th Thule Expedition, enumerates 6 species of ferns and their allies, 2 conifers, 47 monocotyledons, and 139 dicotyledons, together with 12 hybrids. Polunin²⁸ records 391 species from Akpatok island, of which 129 were vascular plants and the remainder various groups of cryptogams. Other important contributions to the flora of this region are those of Holm²⁹ and Johansen.³⁰

Transcontinental Region.

This region occupies, to a large extent, a transitional position between the Arctic Region to the north and the Eastern Region to the south, not only in regard to climate but also in its vegetation. As the name implies, it stretches across the continent from the gulf of St. Lawrence to Yukon and through Alaska to the Pacific ocean. It includes the whole of the Hudsonian and the western part of the Canadian Zone in Merriam's classification. No land elevations in the eastern part reach an altitude likely to alter the characteristic plant life, but in the far northwest and Yukon there are mountainous areas reaching to high altitudes. East of this mountainous part, the region is characterized by a generally flat topography with innumerable lakes ranging in size from mere ponds up to Great Bear lake with an area of 11,660 square miles. Bogs and muskegs are also very common. The altitude of the mountains and the areas and elevations of the chief lakes will be found in Chapter I at pp. 8 and 9, and 12 and 13 respectively.

Some idea of the variations in the climate of different parts of this region may be obtained from the figures in the following statement, derived from records covering the years 1909 to 1937, inclusive. It should be noted that the places of record are on the sea coast or along river courses and therefore are not representative of higher altitudes occurring especially in the northwestern part of the region.

METEOROLOGICAL RECORDS IN THE TRANSCONTINENTAL REGION.

Place.	Absolute Minimum Range.	Mean Temperature.		Average Rain, June to Sept.	Average Sunshine, May to October.
		January.	July.		
	°F.	°F.	°F.	in.	hr.
Harrington Harbour, P.Q.....	-37 to -14	8.0	53.2	8.99	1
Fort George, P.Q.....	-52 to -37	-11.9	54.4	9.81	1
Port Nelson, Man.....	-55 to -40	-20.0	54.0	7.92	1
Churchill, Man.....	-49 to -42	-18.9	52.9	8.88	1
The Pas, Man.....	-54 to -28	-7.3	64.3	8.43	1,288.0
Fort Vermilion, Alta.....	-78 to -27	-14.5	60.0	7.17	1,417.4
Fort Good Hope, N.W.T.....	-69 to -46	-22.9	59.5	5.97	1
Dawson, Yukon.....	-66 to -36	-21.0	59.3	5.57	1

¹ Data not available.

The outstanding feature of this region is the belt of forest, mainly coniferous, which extends throughout except for the high altitudes in Yukon. Characteristic species are the White Spruce (*Picea glauca*), Black Spruce (*Picea mariana*), Tamarack (*Larix laricina*), Balsam Fir (*Abies balsamea*), Jack Pine (*Pinus banksiana*), Aspen (*Populus tremuloides*), Balsam Poplar (*Populus balsamifera*), and White Birch (*Betula papyrifera*).

Some of the most characteristic shrubs are Junipers (*Juniperus communis* and *horizontalis*), Scrub Birch (*Betula glandulosa*), Buffalo Berry (*Shepherdia canadensis*), Swamp Red Currant (*Ribes triste*), Northern Gooseberry (*Ribes oxycanthoides*), Shrubby Cinquefoil (*Potentilla fruticosa*), Bearberry (*Arctostaphylos Uva-ursi*), Wild Rosemary (*Andromeda Polifolia*), Leather-leaf (*Chamaedaphne calyculata*), Labrador Tea (*Ledum groenlandicum*), Swamp Laurel (*Kalmia polifolia*), Creeping Snowberry (*Chiogenes hispidula*), Rock Cranberry (*Vaccinium Vitis-idaea*).

Herbaceous species characteristic of the area are Marsh Arrow-grass (*Triglochin palustris*), Tall Cotton-grass (*Eriophorum angustifolium*), Tufted Hair-grass (*Deschampsia caespitosa*), Holy Grass (*Hierochloë odorata*), Floating Pondweed (*Potamogeton natans*), Twisted-stalk (*Streptopus amplexifolius*), Coral Root (*Coralorrhiza trifida*), Rattle-snake Plantain (*Peramium ophioides*), Gold Thread (*Coptis trifolia*), Northern Stitchwort (*Stellaria borealis*), Kidney-leaved Violet (*Violet renifolia*), Grass of Parnassus (*Parnassia palustris*), Bunch-berry (*Cornus canadensis*), Baked-apple Berry (*Rubus Chamaemorus*), One-flowered Wintergreen (*Moneses uniflora*), Cow-wheat (*Melampyrum lineare*), Twin-flower (*Linnaea americana*).

Apparently only one species is confined to this region, namely, the Small White Waterlily (*Nymphaea tetragona*).

Extensive lists of the flora of this region have been published by various investigators but, as much of the interior is inaccessible by ordinary means of conveyance, only certain areas along the coast have been studied intensively in the eastern part. The list issued by St. John³¹ for the north shore of the gulf of St. Lawrence included 31 species of ferns and allied plants, 7 species of conifers, 146 native and 7 introduced species of monocotyledons, 240 native and 31 introduced species of dicotyledons. A later list by Lewis,³² covering a somewhat similar area, contained the names of 567 vascular plants. In connection with the southern and eastern borders of James bay, a list of plants collected by Potter³³ contained 16 species of ferns and allied groups, 8 species of conifers, 94 species of monocotyledons and 200 species of dicotyledons. Introduced plants were included in the above totals.

In the west, Raup's investigations²⁴ covered an area somewhat transitional between the Transcontinental, Prairie, and Western Floral Regions. As the result of an extensive survey he mentions the occurrence of 38 species of ferns and allied groups and 716 species of seed-plants. Considerable areas of saline soil occur in the region traversed in which 14 species characteristic of such habitats were noted. Among these were *Triglochin maritima*, *Distichlis spicata*, *Chenopodium rubrum*, *Salicornia europaea*, *Suaeda depressa*, *Spergularia salina*, *Ranunculus cymbalaria*, and *Plantago eriopoda*, all of which are characteristic plants of the sea coast.

Eastern Region.

This region, which corresponds in most particulars to the Hardwood Forest Zone of Macoun and Malte,²³ contains a large variety of soil-types. While practically all the higher altitudes are covered by forests up to their summits, except where they have been destroyed as the result of fire or lumbering operations, there are two well-marked treeless areas where the vegetation consists of scrub-heath. One of these areas constitutes the "barrens" of northern Cape Breton island, while the other consists of a small plateau 4 miles long by 2 miles broad on the summit of mount Albert in the Gaspé peninsula. At no other places within the region does altitude appear to exercise a controlling influence upon the flora.

METEOROLOGICAL RECORDS IN THE EASTERN REGION.

Place.	Absolute Minimum Range.	Mean Temperature.		Average Rain, June to Sept.	Average Sunshine, May to October.
		January.	July.		
	°F.	°F.	°F.	in.	hr.
Halifax, N.S.....	-21 to 7	23.0	64.8	15.99	1
Annapolis Royal, N.S.....	-12 to 5	23.0	63.9	13.01	1,129.9
Charlottetown, P.E.I.....	-23 to -1	17.2	65.1	12.78	1,216.2
Fredericton, N.B.....	-35 to -15	12.7	66.0	14.74	1,208.5
Quebec, P.Q.....	-32 to -11	9.7	66.7	16.05	1,109.7
Spirit Lake, P.Q.....	-56 to -36	0.0	61.9	15.76	1,086.2
Kingston, Ont.....	-31 to 0	18.2	68.4	11.40	1,307.1
Haileybury, Ont.....	-48 to -23	6.7	67.3	13.36	1
Moose Factory, Ont.....	-56 to -32	-4.4	61.2	11.57	1
Port Arthur, Ont.....	-37 to -16	6.6	62.9	12.53	1
Kenora, Ont.....	-50 to -23	-0.4	66.2	13.40	1

¹ Data not available.

While most of the plants in this area extend southward through the district bordering on the Great Lakes into the United States, very few species have a westward extension beyond lake Winnipeg into the Prairie Region. If, for the present, the Eastern and Interlacustrine Regions be considered together, there are 14 families, with 1 or 2 genera in each, which do not occur elsewhere in Canada. These, with their respective genera, are as follows: *Eriocaulaceae*—*Eriocaulon*; *Pontederiaceae*—*Heteranthera*, *Pontederia*; *Xyridaceae*—*Xyris*; *Acanthaceae*—*Dianthera*; *Thymelaeaceae*—*Dirca*; *Hamamelidaceae*—*Hamamelis*; *Ilicaceae*—*Ilex*, *Nemopanthis*; *Juglandaceae*—*Carya*, *Juglans*; *Menispermaceae*—*Menispermum*; *Phrymaceae*—*Phryma*; *Podostemonaceae*—*Podostemon*; *Rutaceae*—*Xanthoxylum*; *Staphyleaceae*—*Staphylea*; *Tiliaceae*—*Tilia*.

In addition to the above 17 genera, there are 59 others confined to the eastern half of the Dominion. A list of these will be found in the present author's "Survey".¹⁶

While the majority of the trees in this area are deciduous in nature, there are also a considerable number of evergreen species, the most characteristic of which are White Pine (*Pinus Strobus*), Red Pine (*Pinus resinosa*), Hemlock (*Tsuga canadensis*), and White Cedar (*Thuja occidentalis*).

Some of the more important deciduous trees are Yellow Birch (*Betula lutea*), Burr Oak (*Quercus macrocarpa*), Red Oak (*Quercus rubra*), Beech (*Fagus grandifolia*), White Elm (*Ulmus americana*), Sugar Maple (*Acer saccharum*), Red Maple (*Acer rubrum*), White Ash (*Fraxinus americana*), Black Ash (*Fraxinus nigra*), Black Cherry (*Prunus serotina*).

Among the numerous shrubs found in this region, mention may be made of Ground Hemlock (*Taxus canadensis*), White Virgin's Bower (*Clematis virginiana*), Purple Flowering Raspberry (*Rubus odoratus*), Woolly Steeple-bush (*Spiraea tomentosa*), Staghorn Sumac (*Rhus hirta*), Prickly-fruited Gooseberry (*Ribes cynosbati*), Blue-berried Grape (*Vitis vulpina*), Smooth-leaved Honeysuckle (*Lonicera dioica*), Withe-rod (*Viburnum cassinoides*), and various others.

Herbaceous species are very numerous. Among those typical of the forest floor are Yellow Clintonia (*Clintonia borealis*), Yellow Adder's Tongue (*Erythronium americanum*), White Trillium (*Trillium grandiflorum*), Hairy Solomon's Seal (*Polygonatum biflorum*), Red Baneberry (*Actaea rubra*), Liver-leaf (*Anemone hepatica*), Squirrel Corn (*Dicentra canadensis*), Two-leaved Mitrewort (*Mitella diphylla*), Coolwort (*Tiarella cordifolia*), Hairy Sweet Cicely (*Osmorrhiza Claytoni*), Enchanter's Nightshade (*Circaea lutetiana*), Wild Sarsaparilla (*Aralia nudicaulis*), Round-leaved American Wintergreen (*Pyrola americana*), Blue Wood Aster (*Aster cordifolius*), Broad-leaved Golden Rod (*Solidago flexicaulis*), Tall Rattlesnake-root (*Prenanthes trifoliolata*), and many others.

Characteristic of swampy open ground are a number of species with showy flowers such as Purple Fringed Orchid (*Habenaria psycodes*), Drooping Ladies' Tresses (*Spiranthes cernua*), Closed Gentian (*Gentiana Andrewsii*), Turtle Head (*Chelone glabra*), Square-stemmed Aster (*Aster puniceus*), Golden Ragwort (*Senecio aureus*).

Macoun and Malte,²³ after noting the succession of spring, summer, and autumn flowers in this region, call special attention to the lavish display of colouring in the forest at the end of the growing season in the following passage:—

Very characteristic of the zone is the autumnal colouring of the leaves of trees, shrubs, and herbaceous plants. This autumnal colouring lasts a comparatively long time, from about the first week in September to the second week in October, dependent on the dryness of the season. During that period the most splendid display of colours is exhibited, especially in the open mixed woods where underbrush is well developed. Every shade of yellow, golden bronze, red and scarlet is mixed in a gorgeous symphony of colours generally most marvellously modulated by the sombre deep dark or bluish green of the conifers, which are dotted among the deciduous trees. No such wealth of colour is ever met with in any other country.

A feature of considerable interest, as has been pointed out by Fernald,^{35, 36} is the presence in Nova Scotia, doubtless due to the milder winter climate, of a number of plants characteristic of the Coastal Plain Region of the United States. Among these may be mentioned *Lophiola americana*, *Lilaeopsis lineata*, *Sabbatia Kennedyana*, *Gerardia maritima*, *Utricularia subulata*.

Specially characteristic of the Eastern Region are certain plants which, as pointed out by Fernald,³⁷ show a remarkable discontinuity in their distribution. In this connection he writes: "The splendid sunflower-like *Senecio Pseudo-Arnica* Less. abounds on the shores of Bering sea, thence southwestward to Japan and Northern Korea and southeastward to Vancouver island. Otherwise it is known only as a

sea-strand plant centring on the gulf of St. Lawrence but with outlying stations northward beyond Hamilton inlet and very rarely southward to Grand Manan island at the entrance of the bay of Fundy; and it has a well-marked variety endemic to the Mingan islands". Elsewhere³⁸ he states that "these areas which have been free from vigorously eroding continental ice-sheets since the opening of the long interglacial epoch (preceding the last continental advance) are at once distinguished by the presence of hundreds of species which in eastern America are known nowhere else—and which are interpreted as relics of the flora which was widespread across the boreal regions during the long interglacial epoch but which was recently exterminated from the intermediate areas by the advance of the Wisconsin ice-sheet. Such isolations in the regions uninvaded by the latest continental ice are indicated by *Polystichum mohrioides*, *Senecio resedifolius*, *Lesquerella arctica*, *Erigeron compositus* and *Crepis nana*; and restriction to unglaciated arctic America by *Oxytropis arctobia*. With these plants, chiefly of western America, now isolated on the unglaciated areas about the gulf of St. Lawrence or in northern Labrador, there are many endemics (more than 100 known in this, as yet, scarcely explored area) which are closely related to species of remote geographic range, rather than to species of the adjacent continental region. Such endemics are well illustrated by *Salix calcicola*, eastern representative of the northwestern *S. Richardsonii*".

One of the principal areas to escape glaciation in this region is the Gaspé peninsula. Here, as pointed out by Marie-Victorin,¹⁶ are a number of relics which also are found in the western cordilleran region, such as *Danthonia intermedia*, *Dryas Drummondii*, *Erigeron hyssopifolius*, etc. Others are endemics with cordilleran affinity, such as *Astragalus gaspensis*, *Gentiana gaspensis*, *Aster gaspensis*, etc.

Among the more important publications dealing with the flora of the Eastern Region mention may be made of those of Lindsay³⁹ and Nichols⁴⁰ for Nova Scotia of which the latter dealt mainly with an ecological survey but also included the names of many vascular plants and mosses. The list of Hurst⁴¹ included 595 species and varieties for Prince Edward Island, but additions made since bring the total of native and introduced plants up to 641. The flora of New Brunswick has been investigated by Fowler⁴² who gives the detailed distribution of 985 species of vascular plants in that province. The comprehensive work of Marie-Victorin³ on the flora of Quebec deals mainly with the southern part of that province as far north as lake St. John and the Saguenay river and east of the gulf of St. Lawrence with the exception of the Gaspé peninsula. Altogether, 1,917 species are described or mentioned. Of the various papers dealing with the province of Ontario, one of the most important is that of Fernald⁴³ relating partly to the flora of the Bruce peninsula.

Interlacustrine or Carolinian Region.

This is the smallest of all the floral regions into which the country has been divided, but nevertheless it has some quite unique features when viewed from a botanical standpoint. Owing to its proximity to the Great Lakes, this region has a shorter and milder winter than the country farther north, in this respect resembling the southern part of Nova Scotia.

There are 11 families found in this region which do not occur elsewhere in Canada. These, with the genera contained in them, are as follows: *Dioscoreaceae*—*Dioscorea*; *Saururaceae*—*Saururus*; *Moraceae*—*Morus*; *Anonaceae*—*Asimina*; *Magnoliaceae*—*Liriodendron*, *Magnolia*; *Phytolaccaceae*—*Phytolacca*; *Lauraceae*—*Ben-*

zoin, *Sassafras*; *Platanaceae*—*Platanus*; *Cassiaceae*—*Cercis*, *Gleditschia*, *Gymnocladus*; *Melastomataceae*—*Rhexia*; *Bignoniaceae*—*Tecoma*.

METEOROLOGICAL RECORDS IN THE INTERLACUSTRINE REGION.

Place.	Absolute Minimum Range.	Mean Temperature.		Average Rain, June to Sept.	Average Sunshine, May to October.
		January.	July.		
	°F.	°F.	°F.	in.	hr.
Vineland ¹	-14 to 11	24.0	70.0	11.67	1,402.4
Grimsby.....	-21 to 10	21.2	69.0	10.78	2
Woodstock ¹	-26 to 2	20.5	67.8	11.96	1,294.0
London.....	-27 to 5	22.4	69.2	11.83	2
Harrow.....	-20 to 9	25.0	72.0	9.45	1,370.5

¹ Vineland is 323 feet, while Woodstock is 980 feet above sea-level.

² Data not available.

In addition to the 15 genera mentioned above, there are 32 others peculiar to this region. A list of these will be found in the present author's "Survey".¹⁶ There are 262 species in this area which are not indigenous to any other part of Canada.

Some of the trees confined to this region are Black Walnut (*Juglans nigra*), Mockernut Hickory (*Carya alba*), Pignut Hickory (*Carya glabra*), Black Oak (*Quercus velutina*), Scarlet Oak (*Quercus coccinea*) and 5 other species of Oak, Blue Ash (*Fraxinus quadrangulata*).

Among the shrubs are Bristly Greenbrier (*Smilax hispida*), Poison Sumac (*Rhus Vernix*), Pink-flowered Crab-apple (*Pyrus glaucescens*), Woolly-leaved Grape (*Vitis aestivalis*), Flowering Dogwood (*Cornus florida*), and Deerberry (*Vaccinium stamineum*).

Some of the numerous herbs are White Adder's Tongue (*Erythronium albidum*), Yellow Fringed Orchid (*Habenaria ciliaris*), Flowering Spurge (*Euphorbia corollata*), Perennial Lupin (*Lupinus perennis*), Smooth-fruited Prickly Pear (*Opuntia humifusa*), Butterfly-weed (*Asclepias tuberosa*), Broad-leaved Water-leaf (*Hydrophyllum canadense*), Wild Bergamot (*Monarda fistulosa*), Dense Button-snakeroot (*Liatris spicata*), Tall Ironweed (*Vernonia altissima*).

Among the more important publications dealing with the flora of this region are those of Dodge for Lambton county⁴⁴ and Point Pelee.⁴⁵ The latter work contains the names of 865 species of vascular plants. Included in the district investigated was Pelee island, the most southerly part of the Dominion of Canada. On Pelee island, Dodge found 408 species, but he thinks "there should be found on this island about 650 or 700 species growing without cultivation", which shows "clearly that there is still work for a local botanist".

In Zenkert's work,⁴⁶ 1,702 species and varieties are mentioned, many of which occur on the Canadian side of the International Boundary.

Prairie Region.

The ground in this region rises gradually from about 750 feet in the Red River valley to about 4,500 feet above sea-level in the foothills of the Rocky mountains. The soil is usually deep and so the vegetation is better enabled to withstand drought by withdrawing moisture from the lower layers through the deeply penetrating roots.

The characteristic climatic features are wide variations in temperature, low annual precipitation, strong winds, and a high percentage of sunshine. The figures for some stations on the prairie are given below.

METEOROLOGICAL RECORDS IN THE PRAIRIE REGION.

Place.	Absolute Minimum Range.	Mean Temperature.		Average Rain, June to Sept.	Average Sunshine, May to October.
		January.	July.		
	°F.	°F.	°F.	in.	hr.
Winnipeg, Man.....	-45 to -21	-2.6	66.7	10.75	1,373.0
Brandon, Man.....	-51 to -26	-2.6	64.6	9.57	1,278.0
Indian Head, Sask.....	-50 to -20	-1.0	63.5	9.87	1,228.6
Saskatoon, Sask.....	-55 to -16	-2.7	62.8	8.63	1
Rosthern, Sask.....	-59 to -19	-4.2	62.5	8.29	1,398.3
Swift Current, Sask.....	-54 to -12	6.9	65.7	8.43	1,487.2
Lethbridge, Alta.....	-45 to 4	15.0	65.0	7.93	1,542.6
Edmonton, Alta.....	-52 to -10	6.2	61.4	10.08	1,349.8
Beaverlodge, Alta.....	-56 to -3	0.6	57.0	7.34	1,360.5

¹ Data not available.

While the typical prairie is treeless—except along the river valleys—there is a transitional belt of mixed prairie and woodland along the eastern and northern sides. In marked contrast to the Eastern and Interlacustrine Regions there is no family of plants confined in Canada to the Prairie Region. The number of genera which occur only on the prairie is also much reduced, amounting to 15 altogether. There are, however, about 267 species characteristic of the prairie and not occurring elsewhere, about half of which are included under the three families of composites, leguminous plants, and grasses.

A characteristic feature of certain parts of the Prairie Region is the presence of lakes with no outlet, around the margin of which the soil is saline or alkaline. In such localities plants occur which elsewhere are found on the sea coast, such as Spike Grass (*Distichlis spicata*), Sea Crowfoot (*Ranunculus Cymbalaria*), Sea Milk-wort (*Glaux maritima*), and others.

On the dry prairie a marked feature of the vegetation is the abundance of xerophytes, that is, plants with adaptations calculated to counteract the loss of water from the plant by evaporation. As examples, the following species, which are confined in their distribution to the Prairie Region, may be mentioned. Among shrubby types, the Winter Fat (*Eurotia lanata*) has a dense covering of hairs, while the Thorny Buffalo Berry (*Shepherdia argentea*) has scales on the leaves. Of the herbaceous types, the Hoary Sage-brush (*Artemisia cana*) is covered with hairs; the Beard-tongue (*Pentstemon nitidus*) is glaucous; the Purple Skeleton-weed (*Lygodesmia juncea*) has the leaves much reduced in size; while in the Purple Cactus (*Mammillaria vivipara*) the stem is fleshy and leaves are absent altogether. As mentioned above, some of the prairie plants are deep-rooting and are thus enabled to withstand a period of drought.

The 15 genera which are confined to the Prairie Region are as follows: the family Gramineae includes *Buchloë*, *Munroa*, and *Schedonnardus*; the family Leguminosae includes *Amorpha*, *Petalostemon*, and *Thermopsis*; the family Compositae includes *Actinea*, *Gutierrezia*, *Hymenopappus*, and *Thelesperma*; while the other genera are *Eurotia*, *Paronychia*, *Mammillaria*, *Musineon*, and *Heliotropium*.

Of the trees occurring in the Prairie Region, the Lance-leaved Cottonwood (*Populus acuminata*) and Narrow-leaved Cottonwood (*Populus angustifolia*) do not occur naturally outside that area. The Manitoba Maple (*Acer Negundo*), while characteristic of the prairie, ranges for some distance beyond the Lake of the Woods into the Eastern Region. Some characteristic eastern species such as *Ulmus americana* and *Quercus macrocarpa* extend for a considerable distance into the prairie, while a typical western species, the Lodgepole Pine (*Pinus contorta*) is found on the western part of the Cypress hills, in Alberta.

The absence of trees on the true prairie has been the subject of various explanations. One of these is the prevalence of grass fires during summer which would tend to destroy all woody types of vegetation. Another possible cause is a period of drought which would tend to prevent the successful establishment of seedling trees. A third and much more probable cause was the former prevalence of large herds of buffalo. Only herbaceous types of vegetation could be expected to survive successfully the constant cropping of grazing animals.

There are about 16 species of shrubs confined to the Prairie Region, some of which have already been mentioned. Among the others are Buffalo Currant (*Ribes aureum*), Prairie Cherry (*Prunus Vesseyi*), and Skunk-bush (*Rhus trilobata*).

Of the numerous herbs whose distribution is limited to the prairie, only a few can be mentioned here. Some of these are Grama Grass (*Bouteloua oligostachya*), Prairie Violet (*Viola pedatifida*), Big-seed Dock (*Rumex venosus*), Prairie Turnip (*Psoralea esculanta*), Scarlet Gaura (*Gaura coccinea*), Prairie Lily (*Mentzelia decapetala*), Oval-leaved Milkweed (*Asclepias ovalifolia*), Western Ragweed (*Ambrosia psilostachya*).

Macoun and Malte²³ divide this region into three subdivisions or prairie steppes with their characteristic floral elements, the more important species in each subdivision being indicated.

A more detailed account of the distribution of plants in Manitoba will be found in the Check List of Jackson, Higham, and Groh⁴⁷ in which 42 species of ferns and allied plants, 12 species of conifers, 274 species of monocotyledons and 702 species of dicotyledons are recorded.

For Saskatchewan, Fraser and Russell⁴⁸ have indicated the distribution of 38 species of ferns and their allies, 9 species of conifers, 335 species of monocotyledons and 1,013 species of dicotyledons. Included in the list are 11 species partial to saline soil and also found on the sea coast which would indicate that much of the prairie was in comparatively recent times under the sea and that the coast-line was formerly far removed from its present limits.

No separate list appears to have been made of the species occurring in Alberta but the papers of Lewis, Dowding, and Moss,^{49, 50, 51} although mainly ecological in nature, include the names of many species not only of vascular plants but also of some mosses and lichens as well as fresh-water algae.

Western Region.

This region, extending from the Rocky mountains to the Pacific coast, presents a greater diversity of topography and climate than any of the other regions. The topography is described in some detail at pp. 6 to 8. There are numerous mountain ranges, on many of the higher altitudes of which glaciers and perpetual snow are present, while between the mountains are deep trenches or river valleys where the climate is moderate. On the western side of the Coast range rainfall is very

TYPICAL FLORAS AND HABITATS OF THE ARCTIC, TRANSCONTINENTAL AND PRAIRIE REGIONS



Reading from left to right the layout shows: **Arctic Region.**—Catkins of Arctic Willow, Baffin island; Arctic flora (Stitchwort) at edge of melting snowbank, Eskimo Point, Baffin island; Arctic Poppy; Mountain Avena in blossom, Baffin island; typical landscape of Arctic Prairie, showing lupines in foreground; White Heather, a typical Arctic plant. **Transcontinental Region.**—Plants (Bunch Berry, Violet, Strawberry, etc.) and moss on forest floor, typical of upland situations of Transcontinental; a stand of Black Spruce and Tamarack in the Transcontinental; muskeg pool, showing typical muskeg flora with small Black Spruce in the background; Labrador Tea blossoms; blossoming Labrador Tea *in situ*, with Jack Pine in middle distance and spruce forest in background. **Prairie Region.**—Landscape with slough in foreground and typical rolling prairie in background; dry district of Prairies, Cypress hills, Sask., showing willows in creek bed and cactus in foreground; shore of lake Johnston, near Moose Jaw, Sask., showing white alkali mud—this is a typical Prairie habitat.

Courtesy, National Museum of Canada and Dominion Forest Service, Department of Mines and Resources, Ottawa

TYPICAL FLORAS AND HABITATS OF THE EASTERN AND INTERLACUSTRINE REGIONS



Eastern Region.—Upper left: Typical deciduous trees and summer herbage along Tay canal, Lanark County, Ont.; Centre: Maples—Autumn foliage in young maple forest, Gatineau district, Que.; Upper right: Staghorn Sumac, near Ottawa, Ont.; Lower left: Maiden-hair Fern, White Trillium and Wild Ginger, typical wood- and plants of Eastern Region; Lower right: White Water Lilies, typical in lakes and streams of the Eastern Region. **Interlacustrine or Carolinian Region.**—Upper left: Sprig of Flowering Dogwood, conspicuous shrub of the Carolinian Region; Middle left: Leaves and flower of Tulip tree, native of Carolinian Region; Centre: Black Walnut in open location, common in original Carolinian forest; Upper right: Flowers of American Lotus, ranging into Canadian Carolinian around Pelee island; Lower right: Showy Lady's Slipper, conspicuous orchid ranging from the Carolinian through most of the Eastern Region.

Courtesy, National Museum of Canada and Dominion Forest Service, Department of Mines and Resources, Ottawa.

TYPICAL FLORAS AND HABITATS OF THE WESTERN REGION



Western Region.—Upper left: Douglas Fir, Western Cedar and Western Hemlock, near Seabird lake, B.C.; Upper right: Willow-grown banks and pond lilies at Meadow lake, about 4,000 ft. elevation in the Selkirk range; Middle right: Typical flora with background of Engelmann spruce in alpine meadow, about 4,500 ft. elevation, Lihumpton Park, B.C.; Middle left: Salal shrubbery in flower, Graham island, B.C.; Lower right: Typical forest vegetation, Skunk Cabbage in foreground, lichen festoons on trees, Graham island, B.C.; Foot of layout: Greasewood, Cosyros lake, Dry Belt of B.C.; Inset: Lewisia in bloom, Vasseux lake, Dry Belt of B.C.

Courtesy, National Museum of Canada, Dominion Forest Service, Department of Mines and Resources, Ottawa, and Mr. P. Lyford, Vancouver, B.C.

abundant, while to the east of that range is situated the Dry Belt extending from Okanagan to Taela lakes. The Interior Wet Belt, another zone of abundant precipitation, occurs along the western slope of the Selkirk mountains, while there is also a smaller dry belt in the vicinity of Kootenay lake. Some indication of the diversity of climatic conditions may be obtained from the meteorological records of the places given below. However, most of these places are centres of settlement and agriculture at comparatively low elevations and are not representative of conditions obtaining on the higher mountain slopes. Barkerville, with an elevation of 4,180 feet, is the highest point included.

METEOROLOGICAL RECORDS IN THE WESTERN REGION.

Place.	Absolute Minimum Range.	Mean Temperature.		Average Rain, June to Sept.	Average Sunshine, May to October.
		January.	July.		
	°F.	°F.	°F.	in.	hr.
Invermere.....	-43 to 0	11.7	63.0	5.49	1,347.7
Vancouver.....	4 to 29	35.6	63.3	9.28	1,278.9
Victoria.....	-2 to 34	38.6	59.9	3.57	1,381.0
Clayoquot.....	10 to 31	39.5	57.6	15.71	1
Kamloops.....	-31 to 20	21.8	69.8	4.24	1,434.1
Prince George.....	-57 to 4	14.0	59.3	6.79	1,229.2
Prince Rupert.....	-6 to 30	35.2	56.0	21.84	790.7
Barkerville.....	-42 to 4	16.2	54.2	13.34	1
Athlin.....	-58 to 0	2.0	54.0	3.95	1

¹ Data not available.

While there is no single family peculiar to the Western Region, there are 80 genera which do not occur elsewhere in Canada and the number of characteristic species is very large. Of these western genera, 2 are gymnosperms (*Chamaecyparis* and *Pseudotsuga*), while 12 are monocotyledons, including 6 of the lily family, but only 1 (*Melica*) of the grass family. The genus *Phyllospadix* occurs in the sea.

There are 66 genera of dicotyledons, of which 3 belong to the family *Cruciferae*, 3 to *Ericaceae*, 6 to *Umbelliferae*, and 18 to the family *Compositae*. The full list of genera will be found in the author's "Survey".¹⁶

Some of the characteristic trees of the Transcontinental Region are found also in the northern part of the Western Region, such as White Spruce, Black Spruce, Tamarack, Balsam Fir, and American Aspen. But, generally speaking, the trees of the Western Region are quite different. Among those with a comparatively wide distribution, at least in the southern part, are Lodgepole Pine (*Pinus contorta*), Western White Pine (*Pinus monticola*), Douglas Fir (*Pseudotsuga taxifolia*), Western Red Cedar (*Thuja plicata*), Black Cottonwood (*Populus trichocarpa*). The Engelmann Spruce (*Picea Engelmanni*) occupies a wide area to the east of the Coast Belt, while Western Larch (*Larix occidentalis*) is confined to the southeast part of British Columbia.

Four species occupy the higher slopes of the mountains and reach the limit of tree distribution, namely, White-bark Pine (*Pinus albicaulis*), Limber Pine (*Pinus flexilis*), Alpine Fir (*Abies lasiocarpa*), Alpine Larch (*Larix Lyallii*).

Some characteristic shrubs of the Western Region are Oregon Grape (*Mahonia Aquifolium*), Thimbleberry (*Rubus parviflorus*), Buck-brush (*Ceanothus sanguineus*), Devil's Club (*Echinopanax horridum*), Tall Mountain Bilberry (*Vaccinium membranaceum*), Wax-berried Elder (*Sambucus glauca*).

Among the more interesting herbaceous species found in this area are Skunk Cabbage (*Lysichiton camtschatcense*), Large-flowered Adder's Tongue (*Erythronium grandiflorum*), Western Wake-robin (*Trillium ovatum*), Western Wild Ginger (*Asarum caudatum*), Western Yellow Waterlily (*Nymphaea polysepala*), and various others.

The Selkirk range has a much higher rainfall than the Rocky mountains, resembling in this respect the conditions prevailing in the Coast Belt and as a result many species are common to both areas. Among such are Western Yew (*Taxus brevifolia*), Western Hemlock (*Tsuga heterophylla*), Mountain Hemlock (*Tsuga Mertensiana*), and Grand Fir (*Abies grandis*).

Other species of trees confined to the Coast Belt are Yellow Cedar (*Chamaecyparis nootkatensis*), Sitka Spruce (*Picea sitchensis*), Amabilis Fir (*Abies amabilis*), Red Alder (*Alnus rubra*), Garry Oak (*Quercus Garryana*), Broad-leaved maple (*Acer macrophyllum*), Cascara (*Rhamnus Purshiana*), Western Dogwood (*Cornus Nuttallii*), Madroña (*Arbutus Menziesii*).

Among the shrubs of the Coast Belt, mention may be made of Red-flowered Currant (*Ribes sanguineum*), Salmon Berry (*Rubus spectabilis*), Indian Plum (*Osmaronia cerasiformis*), Salal (*Gaultheria Shallon*), Red Bilberry (*Vaccinium parvifolium*), and others.

Some characteristic herbs of the coast are Western Buttercup (*Ranunculus occidentalis*), Cut-leaved Gold Thread (*Coptis asplenifolia*), Vanilla Leaf (*Achlys triphylla*), Many-flowered Dutchman's Breeches (*Dicentra formosa*), Three-leaved Coolwort (*Tiarella trifoliata*), Deer Cabbage (*Menyanthes Crista-galli*), and various others.

The Dry Belt has likewise quite a number of species peculiar to that area, but the only characteristic tree is the Ponderosa Pine (*Pinus ponderosa*).

Few shrubby species are confined to the Dry Belt, the chief being Antelope Brush (*Purshia tridentata*) and Sage-brush (*Artemisia tridentata*).

The characteristic herbaceous vegetation of the Dry Belt is mostly xerophytic, such as Bunch Grass (*Agropyron spicatum*), Bitter Root (*Lewisia rediviva*), Bladderpod (*Lesquerella Douglasii*), Woolly-Gromwell (*Lithospermum pilosum*), Perennial Gilia (*Gilia aggregata*), Balsam-root (*Balsamorhiza sagittata*), and many other species of Stick-leaf (*Mentzelia*), Lupin (*Lupinus*), etc.

Various species of alpine plants occur between the limit of tree growth and the region of perpetual snow. As mentioned previously, many of these occur also in the Arctic Region. There are, however, in the Western Region about 30 species of alpine plants which do not occur elsewhere in Canada. Of these some are shrubs, such as Alpine Willow (*Salix nivalis*), Red Heather (*Phyllodoce empetrifomis*), Moss Heather (*Cassiope Mertensiana*), while herbs are represented by Alpine Hair-grass (*Deschampsia alpicola*), White Marsh-marigold (*Caltha leptosepala*), several species of Saxifrage (*Saxifraga*), Mountain Pink (*Douglasia nivalis*), Whorled Greek Valerian (*Polemonium confertum*).

The most comprehensive account of the plants of the Western Region is that of Henry,⁷ who describes 2,190 native and introduced species of vascular plants. The work by Brown and Schäffer,⁶ which includes also the Selkirk mountains, enumerates 438 species of ferns and their allies and seed-plants, exclusive of grasses, sedges, and willows, which are not mentioned. Miss Farr's list⁵² contains 38 species of ferns and allied plants and 725 species of seed-plants. The flora of Yoho Park has been investigated by Ulke,⁵³ who records 565 species of vascular plants. David-

son⁵⁴ lists several hundred species from the Skagit River basin, Dryas island, Windermere, Garibaldi mountain, and other localities. Whitford and Craig⁵⁵ give a detailed description accompanied by maps of the distribution of 22 species of coniferous and 26 species of deciduous forest trees.

The outlying islands have been dealt with by Osgood,⁵⁶ who enumerates 7 species of ferns and 118 species of seed-plants as occurring on Queen Charlotte islands. From a comparatively small area of Vancouver island, Glendenning⁵⁷ has enumerated 23 species of ferns and their allies, 13 species of gymnosperms and 547 species of angiosperms. Kermode's list⁵⁸ for the two main island groups includes 57 species of ferns and allied groups and 1,359 species of seed-plants. Of the latter, 284 species were introduced. Of the total species mentioned by Kermode, 19 species of ferns and their allies and 258 species of seed-plants occurred on the Queen Charlotte group.

Section 2.—Cryptogams.

NOTE.—A brief description of the different groups of Cryptogams with their distinguishing characteristics has already been given under "Classification of Flora", pp. 35 to 37.

Ferns and Allied Groups.

There are in Canada 25 genera of ferns (in the proper sense) and 2 of water-ferns. In the two groups combined there are about 76 species. One genus with a single species, namely, Curly Grass (*Schizaea pusilla*) characteristic of the pine barrens of New Jersey, is found in the province of Nova Scotia only. Another rare species, the Hart's Tongue (*Scolopendrium vulgare*) occurs only on limestone rocks in New Brunswick and at a few places in Ontario. Three genera are confined to the Western Region and include the Deer-fern (*Lomaria spicant*), 2 species of Lip-fern (*Cheilanthes*), and the Gold-fern (*Pityrogramma triangularis*).

Several species of ferns have a range extending into the Arctic Region, such as *Cryptogramma acrostichoides*, *Polystichum Lonchitis*, *Dryopteris fragrans*, *Cystopteris fragilis*, and 3 species of *Woodsia*.

The group of water-ferns comprises 2 genera with one species in each, namely, *Azolla caroliniana* found in lake Ontario and British Columbia, and *Marsilea vestita* which occurs in the Prairie Provinces.

The horsetail group includes about 13 species, one of which, the Giant Horsetail (*Equisetum giganteum*) is confined to the coastal area of British Columbia. *Equisetum scirpoides* and 3 other species range into the Arctic Region.

The other genera of the allied groups are *Lycopodium* with 12 species, *Selaginella* with 9 species, and *Isoetes* with 8 species. *Lycopodium selago* and *L. annotinum* reach the Arctic Region.

A fuller account of the fern group will be found in the description by Macoun and Burgess.⁵⁹

Mosses.

This group of plants is well represented in the Canadian flora, the most complete account of their distribution being that of Macoun and Kindberg⁶⁰ who list the names of 1,087 Canadian species. While mosses are most abundant in the southern parts of the Dominion, a considerable number occur also in the Arctic Region. Hesselbo⁶¹ mentions 39 genera and 67 species, of which 13 species are additions to the list of Macoun and Kindberg. In reference to one of these species, *Cinclidium latifolium* Lindb., Hesselbo states that it was collected on Vansittart island where it seemed to occur abundantly but hitherto had been found only in

the Yenisei region of northern Siberia in about latitude 69°–70° N. and in glacial deposits in northern Jutland at a depth of about 83 metres below the ground. Williams⁶² enumerates 68 species from the Arctic Region, of which 11 species (all sterile) belonged to the genus *Drepanocladus*, while *Bryum* was represented by 9 species, of which 5 were fruiting.

One of the most important lists is that of Dupret and Beaulac⁶³ for the region around Montreal containing 255 species, one of which, *Bryum camptoneurum* Card. and Thér., was hitherto undescribed. Another extensive list is that of Miss Brown⁶⁴ who records 346 species from Nova Scotia, of which one was a species new to science and two others had not been found previously in Canada.

Liverworts.

In this group, likewise, Macoun's Catalogue⁶⁵ is the most important work to show the distribution, 163 species being enumerated. Although these plants find a more congenial environment in warmer climates, nevertheless, Hesselbo's list⁶¹ mentions 11 genera and 15 species as occurring in the Arctic Region, 4 of which species are not included in Macoun's Catalogue. For Nova Scotia, Miss Brown's list⁶⁴ includes 119 species of which 4 are new to Canada and 2 are new to North America.

For Western Canada, the chief authority on the distribution of this group is Brinkman⁶⁶ who has listed 254 species for the territory bordering on the Pacific. Among these, 39 species occurred in Yukon, 186 species in British Columbia, and 105 species in Alberta.

Lichens.

Unlike liverworts, the members of this group exhibit a great variety of habitats, some occurring on the surface of the ground, or on the bark of trees, or on bare rocks, or even on old bones. Being able to withstand a much more rigorous climate, they form an important element in the vegetation of the barren lands. Macoun in his Catalogue⁶⁵ enumerates 421 Canadian species, but since that date, with few exceptions, the study of this group has been largely neglected. And yet they are of decided economic importance particularly in the more northern parts, where they constitute the chief food of reindeer and caribou during the winter months.

As might be expected from the foregoing remarks, the lichens are well represented in the Arctic Region, the crustaceous species, according to Merrill,⁶⁷ being best developed, while the foliaceous and fruticose types are mostly dwarfed and infertile. With reference to the tundra formations, he states that "in many places through the Barren Ground region and the Alaskan peninsula the ground is covered to the depth of a foot or more with the debris of successive generations of lichens and mosses of which only the uppermost layer is living". Of the 80 species and 13 varieties listed by Merrill, he states that most of them may be expected to occur in alpine situations of Alberta and British Columbia, but 3 species, namely, *Cetraria chrysantha*, *Polyblastia scotinospora*, and *Verrucaria striatula*, appear to be exclusively Arctic.

Lyngé's report on lichens collected during the Thule Expedition⁶⁸ included the names of 28 genera and 99 species. Of these, 55 species were not included in Macoun's Catalogue, a fact which goes to show that many species of lichens still remain to be discovered in this country. Lyngé further added that it is hardly probable that the collection of 99 species covers as much as one-third of the whole lichen flora of the region.

A list entitled "The Lichens of Manitoba" containing the names of 90 species was published by K. S. Wright as a special chapter in "The Fungi of Manitoba".⁶⁹

Fungi.

Regarded from a consideration of the number of species contained within it, this is doubtless by far the largest subdivision of the plant kingdom in Canada. A realization of this fact is probably the reason why no census list of the species found in the Dominion has ever been published. Consequently only sectional lists for various parts of the country can be referred to here.

The chief descriptive work dealing with the larger forms is that of Güssow and Odell⁷⁰ in which the characteristic features of 62 genera and 174 species are outlined accompanied by numerous photographs. Fraser⁷¹ has described the characters of the various developmental stages of 104 species of rusts occurring in Nova Scotia. The distribution of fungi in this province has also been indicated by MacKay^{72,73} in two lists of considerable length and more recently in a series of three papers by Wehmeyer and his associates.⁷⁴ The general list of Hay⁷⁵ for New Brunswick contains the names of 66 species of the larger saprophytic forms.

For the province of Quebec, Campbell⁷⁶ has enumerated 129 species all of which, except 4 species of *Ascomycetes*, belong to the *Basidiomycetes*, while Pomerleau⁷⁷ has described the characters and distribution of 32 species of *Pyrenomycetes* for the same province.

For the region around Ottawa, including parts of the provinces of Quebec and Ontario, Odell⁷⁸ has published a somewhat extensive list including 338 species of *Basidiomycetes*, 42 species of *Ascomycetes*, and one species of *Myxomycetes*. In contrast with the foregoing, a list of 28 genera and 110 species and varieties of *Myxomycetes* has been described for the province of Ontario by Currie,⁷⁹ the largest genus being *Physarum* with 20 species.

For the province of Manitoba a comprehensive list of 1,989 species (including bacteria and *Myxomycetes*) has been published by Bisby and associates.⁶⁹ Not only are the substrata indicated on which the saprophytic species occur, but also the hosts of the parasitic species. There is in addition a list of fungi observed on man and the higher animals.

A further contribution to the study of rusts in Canada is that of Fraser and Conners⁸⁰ who have recorded the occurrence, with names of hosts, of 161 species in the Prairie Provinces.

A total of 131 species has been recorded by Dearness⁸¹ and others for the Arctic Region together with the host plants or substrata on which they occur. No *Myxomycetes* or *Phycomycetes* are mentioned and only 9 species of rusts and one of the smut group. The others are distributed as follows: 58 species of *Ascomycetes*, 36 species of *Basidiomycetes*, and 27 species of *Fungi imperfecti*.

Algæ.

Comparatively few persons realize how great is the economic importance of this group of plants. It is well known in the case of the higher animals that in the last analysis their food supply consists of plants, but probably it is not so evident in the case of aquatic animals, such as fishes, seals, porpoises, whales, etc. The larger specimens prey on the smaller and these in turn live on crustaceans, etc., and finally a point is reached where the very minute species live on microscopic plants such as diatoms. In this connection Lowe⁸² states: "The phytoplankton of

the lakes of Central Canada has an economic interest as well as a biological interest. The fisheries of Manitoba are justly claimed to be the largest fresh-water fisheries in the world. Last year (1923) the fish taken from lake Winnipeg alone weighed 7,213,900 pounds, and this was not a record year".* From these figures one can draw certain conclusions as to what the total might be for all the lakes and rivers on the earth's surface. Then there are the countless miles of sea coast (not to speak of deeper water) where fish find shelter as well as food and where the larger seaweeds have various industrial uses, being used as food, or as manure for growing crops, or for other purposes.

As in the case of fungi, no general list of algæ, either fresh-water or marine, has up to the present been compiled for Canada. But a considerable amount of attention has been devoted to the elucidation of both groups as a glance at the various papers mentioned in the literature dealing with the subject will show.

As practically all the species of algæ occurring in fresh water are different from those found in the sea it is more convenient to consider both groups from the point of view of the medium in which they grow. Before dealing with their distribution reference may be made to two other groups which are frequently classified as algæ, namely, *Characeae* and *Diatomaceae*.

Characeæ.—The Stoneworts, as the *Characeae* are popularly called, owing to the fact that many species have a deposit of lime in their tissues which makes them brittle, are confined to fresh water. They can be readily recognized by their odour which resembles that of garlic. Very little attention has been devoted to their study in this country but 2 genera, namely, *Chara* and *Nitella* are known to occur. Apparently the only accounts dealing with their distribution in detail are those of Robinson⁸³ who mentions 11 species of *Chara* as Canadian, and the earlier work of Allen.⁸⁴

Diatomaceæ.—Diatoms are found both in fresh water and in the sea, the species occurring in the two habitats being with few exceptions quite different. The most comprehensive list of diatoms, both fresh-water and marine, so far published is that of Bailey⁸⁵ who states: "to prepare anything like a complete list of the diatoms of Canada is an impossibility. Not only is the region of enormous extent, embracing the whole breadth of America where that breadth is the greatest and extending northwards into Arctic regions, but it also presents a great diversity of physical conditions to which these plants, notwithstanding their minuteness and comparatively simple structure, must, like other plants, respond to a greater or less degree. Some of the interior lakes of Canada, like the Quill lakes in Saskatchewan, are saline, and in these quite a number of typically marine genera have been met with in great abundance". Bailey further states that up to 1907 probably not over a hundred species have been listed and these only from Nova Scotia and New Brunswick, while the present list contains the names of 550 species. These are grouped under 98 genera of which the largest by far is *Navicula* with 169 species, followed by *Nitzschia*, *Surirella*, and *Coscinodiscus*, with 48, 32, and 29 species, respectively.

A list of marine diatoms from the Arctic Region identified by Mann⁸⁶ contained names of 42 genera and 227 species. Of these *Navicula* was the largest genus with 64 species, while *Coscinodiscus* contained 23 species.

* According to the latest figures compiled by the Dominion Bureau of Statistics the weight of fish taken from lake Winnipeg in 1936 was: summer, lake Winnipeg, 7,079,500 lb.; winter, lake Winnipeg and Red river, 5,140,200 lb.; total, 12,219,700 lb.

The report by Howe⁸⁷ for Hudson bay mentions 57 species. Other diatoms occurring in fresh water in various districts are referred to in the next section on the fresh-water group.

Fresh-Water Algæ.—The first publication to call attention to this group is that of Kemp⁸⁸ in 1858. But for over half a century from this date little or no attention was devoted to these plants. In more recent times one of the chief lists for Eastern Canada is that of Miss Clare Miller,⁸⁹ who described the characters of 54 species and varieties occurring in the vicinity of Montreal.

Another important paper dealing also with the province of Quebec is that of Lowe⁹⁰ in which were included 12 species of *Flagellata*, 3 species of *Peridineae*, 27 species of *Cyanophyceae*, 61 species of *Diatomaceae*, 199 species of *Chlorophyceae*, and 3 species of *Rhodophyceae*, representing altogether 305 species and 128 genera. The above list included 115 species of desmids. The 3 red species were *Batrachospermum vagum*, *Chantransia scotica*, and *Lemanea torulosa*.

Klugh⁹¹ has published several lists of algæ for Georgian bay and various other districts in Ontario.

The region lying mainly between the Lake of the Woods and lake Winnipeg has been investigated by Lowe⁹² whose report includes 9 species of *Flagellata*, 3 species of *Peridineae*, 22 species of *Cyanophyceae*, 40 species of *Diatomaceae*, 170 species of *Chlorophyceae*, representing altogether 100 genera with 244 species. Of the *Chlorophyceae*, more than half, namely, 91 species, are desmids, the genera *Cosmarium* and *Staurastrum* each having 25 species.

Taylor's two lists^{92,93} for British Columbia included 55 species of *Cyanophyceae*, 34 species of *Chlorophyceae*, one species of *Flagellata*, and 2 species of *Rhodophyceae*, namely, *Lemanea fucina* and *Batrachospermum moniliforme*. Among the *Chlorophyceae* was the species known as Red Snow (*Chlamydomonas nivalis*). Taylor has also published another important paper⁹⁴ on the alpine species of British Columbia.

The desmids of British Columbia have been studied by Wailes⁹⁵ who has recorded 267 species collected in the coastal area, including the Vancouver district, the Nanaimo district, Gabriola island, and Cortes island. The largest genera mentioned are *Cosmarium* with 79 species, *Staurastrum* with 61 species, and *Closterium* with 35 species.

For the Arctic Region, Lowe⁹⁶ recorded the occurrence of 19 species of *Cyanophyceae*, 105 species of *Chlorophyceae* including 69 species of desmids of which the genera containing most species were *Cosmarium* and *Staurastrum*. There was also one species of *Flagellata*, namely, *Synura Uvella*, and one red species, namely, *Batrachospermum vagum*, and 41 species and varieties of diatoms.

Marine Algæ.—The seaweeds found on the Atlantic coast of Canada present a striking contrast with those occurring in similar latitudes on the shores of Europe, especially as regards the number of genera and species. The Canadian species are mostly those found in colder waters, while in Europe the greater abundance of marine species is due to the mitigating influence of the Gulf Stream. While a considerable number of species in all the colour-groups are common to both sides of the Atlantic, such as *Chaetomorpha Melagonium*, *Ascophyllum nodosum*, *Chorda Filum*, *Chondrus crispus*, *Corallina officinalis*, etc., on the other hand, many European genera are entirely absent. In the green group one misses *Codium* and *Derbesia*, while among the brown species there are no representatives of such genera as *Pelvetia*, *Halidrys*, *Cystoseira*, *Dictyopteris*, *Padina*, etc. In the red group the missing genera, such as *Nitophyllum*, *Catenella*, *Griffithsia*, *Sphaerococcus*, etc., are even more numerous.

By way of contrast, a number of species occur on this side of the Atlantic only, such as the Sea Colander (*Agarum Turneri*), *Saccorhiza dermatodea*, *Ptilota pectinata*, etc. Many Arctic species, such as *Rhizoclonium riparium*, *Desmarestia aculeata*, *Odonthalia dentata*, etc., are found also on the Atlantic coast. Others, such as *Alaria membranacea*, *Polysiphonia arctica*, *Lithothamnion glaciale*, are exclusively Arctic, while other Arctic species, such as *Rhodomela Larix*, occur also on the Pacific coast of Canada.

The algal vegetation of the Pacific coast resembles that of the European Atlantic coast in the number of species belonging to the red group, doubtless owing to the warmer water, but there the comparison ends, for the species are mostly different. The same is largely true of the brown group in which many of the genera are also different, as in *Postelsia palmaeformis*, *Macrocystis pyrifera*, *Nereocystis Luetkeana*, some of which reach gigantic proportions.

One of the first lists of species to be compiled was that of Hay and MacKay⁹⁷ for the Maritime Provinces in which the distribution was shown of 4 species of *Cyanophyceae*, 15 species of *Chlorophyceae*, 31 species of *Phaeophyceae* and 33 species of *Rhodophyceae*.

Another more recent list by Bell and MacFarlane⁹⁸ for the same region included 24 species of *Chlorophyceae*, 39 species of *Phaeophyceae*, and 46 species of *Rhodophyceae*. For the Arctic coasts, Kjellman⁹⁹ mentions one species of *Cyanophyceae*, 8 species of *Chlorophyceae*, 15 species of *Phaeophyceae*, and 19 species of *Rhodophyceae*. That these figures do not truly represent the total marine flora is evident from the fact that Kjellman records 72 other species found on the west Greenland coast, most of which doubtless occur also in Arctic Canada.

Another Arctic list is that of Collins and his associates,⁹⁷ which includes a total of 53 species for the four colour-groups of which two species were previously undescribed. A separate list for Hudson bay by Howe⁹³ contained the names of 42 species (one being new) belonging to the four chief groups, together with 57 species of *Diatomaceae*.

For the Pacific coast of Canada, Collins¹⁰⁰ has recorded 40 species of *Chlorophyceae*, 45 species of *Phaeophyceae*, and 114 species of *Rhodophyceae*. As compared with the list for the Maritime Provinces, the preponderance of species belonging to the red group, as the result of higher temperature of the water, is very evident. Of the total species occurring on the coast of Vancouver island, Collins states that 38 p.c. of the brown and 25 p.c. of the red occur also on the Atlantic coast.

The various papers by Setchell and Gardner¹⁰¹ include the names of all species found on the coast from Alaska to California. It is noteworthy that several brown species such as *Postelsia palmaeformis*, *Pterygophora californica*, *Egrecia Menziesii*, and *Pelvetiopsis limitata* find their northern limit on the southern coast of Vancouver island.

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PART V.—FAUNAS OF CANADA.

An article under this heading, by Rudolph M. Anderson, Ph.D., Chief, Division of Biology, Department of Mines and Resources, appeared at pp. 29-52 of the 1937 Year Book.

PART VI.—LANDS, SCENIC, AND GAME RESOURCES OF CANADA.

Canada is distinctly a new country, and her resources are for the most part in the early stages of development. The fur, fishery, and forest resources have, it is true, been the basis of trade for two or three hundred years, but exploitation on the present commercial scale is of relatively recent growth. A notable feature, especially in so young a country, has been the effort directed to conservation and, in the cases of those resources which admit of such methods, the actual replenishment or augmentation of the sources of supply by the practice of reforestation, silviculture, fur farming or the establishment of fish hatcheries.

Numerous surveys and investigations of the extent and value of the resources have been made and broad outlines of the resources of the provinces supplement the information on physical geography given on pp. 1 to 16. Detailed information regarding individual natural resources will be found in the later chapters—Agriculture, Furs, Fisheries, Forestry, Minerals, Water Powers—of this volume.

The treatment of resources considered below is concerned only with those phases of the subject which can be properly regarded as falling under the definition of physiography used in its wider interpretation, and which do not specifically relate to individual subjects treated elsewhere in this volume. A classification of lands resources (where there is naturally overlapping since much land suitable for agriculture remains under forest cover), information on the National Parks, and resources in game and scenery properly fall under this head.

Lands Resources.—Table 1 presents a broad classification of the potential lands resources of Canada, by provinces. The figures are, in the main, based on estimates prepared by the Dominion Forest Service, Lands, Parks, and Forests Branch, and by the Surveyor General and Chief, Hydrographic and Map Service of the Surveys and Engineering Branch, Department of Mines and Resources; they show how the total land area of Canada is made up as between existing and potential agricultural lands, existing and potential forest lands, and lands which are unproductive as regards surface resources. Between the totals of existing and potential agricultural lands and the totals of existing and potential forest lands there is, of course, duplication to the extent of the agricultural lands under forest.

1.—Land Area of Canada, Classified as Agricultural, Forested, or Unproductive.

NOTE.—The land area of Canada is shown classified by tenure in Chapter XXVIII.

Description.	Prince Edward Island.	Nova Scotia.	New Brun- swick.	Quebec.	Ontario.	Mani- toba.
	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.
Agricultural Land—						
Occupied.....	1,861	6,722	6,488	27,038	35,689	23,644
Improved and pasture.....	1,331	2,811	2,686	17,608	28,342	20,489
Forested.....	530	3,911	3,802	9,430	7,347	3,155
Unoccupied.....	105	5,922	10,259	41,314	67,181	26,950
Grass, brush, etc.....	25	2,922	759	1,314	7,181	10,950
Forested.....	80	3,000	9,500	40,000	60,000	16,000
Totals, Agricultural Land.....	1,966	12,644	16,747	68,352	102,870	50,594
Improved, grass, etc.....	1,356	5,783	3,445	18,922	35,523	31,439
Forested.....	610	6,911	13,302	49,430	67,347	19,155
Forested Land—						
Productive.....	725	11,950	21,773	303,500	170,000	30,500
Unproductive.....	—	50	189	70,000	70,000	62,500
Tenure Classification—						
Privately owned.....	723	10,473	11,100	31,048	7,972	8,500
Crown land.....	2	1,527	10,862	342,452	232,028	84,500
Size Classification—						
Merchantable.....	485	7,470	13,383	213,500	56,100	4,615
Young growth.....	240	4,480	8,390	90,000	113,900	25,885
Type Classification—						
Softwood.....	725	8,000	8,329	218,400	65,000	10,950
Mixed wood.....	—	1,150	11,223	66,100	83,000	6,220
Hardwood.....	—	2,800	2,221	19,000	22,000	13,330
Totals, Forested Land.....	725	12,000	21,962	373,500	240,000	93,000
Net Productive Land¹.....	2,081	17,733	25,407	392,422	275,523	124,439
Waste and Other Land².....	103	3,010	2,066	131,112	87,759	95,284
Totals, Land Area.....	2,184	20,743	27,473	523,534	363,282	219,723

Description.	Saskat- chewan.	Alberta.	British Colum- bia.	Yukon and N.W.T.	Canada.
	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.
Agricultural Land—					
Occupied.....	86,989	60,901	5,534	7	254,873
Improved and pasture.....	81,508	54,817	3,640	4	213,236
Forested.....	5,481	6,084	1,894	3	41,637
Unoccupied.....	38,127	75,740	15,166	14,063	294,827
Grass, brush, etc.....	15,127	30,740	5,760	10,063	84,841
Forested.....	23,000	45,000	9,406	4,000	209,986
Totals, Agricultural Land.....	125,116	136,641	20,700³	14,070	549,700
Improved, grass, etc.....	96,635	85,557	9,400	10,067	298,077
Forested.....	28,481	51,084	11,300	4,003	251,623
Forested Land—					
Productive.....	42,160	93,075	85,780	10,000	769,463
Unproductive.....	40,000	37,560	123,760	50,000	454,059
Tenure Classification—					
Privately owned.....	6,250	10,044	15,000	3	101,113
Crown land.....	75,910	120,591	194,540	59,997	1,122,409
Size Classification—					
Merchantable.....	7,305	20,680	36,010	1,000	360,548
Young growth.....	34,855	72,395	49,470	9,000	408,915
Type Classification—					
Softwood.....	8,900	31,770	85,780	4,500	442,354
Mixed wood.....	9,395	40,800	—	3,250	221,138
Hardwood.....	23,865	20,505	—	2,250	105,971
Totals, Forested Land.....	82,160	130,635	209,540	60,000	1,223,522
Net Productive Land¹.....	178,795	216,192	218,940	70,067	1,521,599
Waste and Other Land².....	59,180	32,608	140,339	1,393,496	1,944,957
Totals, Land Area.....	237,975	248,800	359,279	1,463,563	3,466,556

¹ Total agricultural land plus forested land, minus forested agricultural land.² Includes open muskeg, rock, road allowances, urban land, etc.³ An estimate from provincial sources places the

total area of land suitable for tillage at 6,626 sq. miles.

National Parks of Canada.*—The Dominion Government maintains, as the medium through which some of the most outstanding natural beauties of the country may be preserved and popularized, the National Parks Bureau, Lands, Parks, and Forests Branch of the Department of Mines and Resources, which administers the scenic and recreational parks set aside for this purpose. Under the supervision of this same body are the national wild-animal preserves—large fenced areas established for the protection and propagation of species in danger of extinction—the national historic parks, and the historic sites of great national interest which have been acquired throughout the country (see pp. 78 to 90).

The mountain parks include regions of unsurpassed grandeur in the Rocky and Selkirk mountains of Western Canada. Among these are the Banff, Jasper, and Waterton Lakes National Parks in Alberta, located on the eastern slopes of the Rockies; the Kootenay and Yoho parks in British Columbia on the western slopes of the Rockies; and the Glacier and Mount Revelstoke Parks, also in British Columbia, located in the Selkirks. While these parks have a general resemblance to each other, each possesses individual characteristics, varying flora and fauna, and different types of scenery.

Prince Albert National Park in Saskatchewan forms a typical example of the lake country bordering the northwestern prairies, and the Riding Mountain National Park in Manitoba, having a general elevation of 2,000 feet above sea-level, contrasts sharply with the fertile plains to the east. In Ontario are located three small park units, the Point Pelee, Georgian Bay Islands, and the St. Lawrence Islands National Parks, which were established primarily as recreational areas. Fort Anne National Park in Nova Scotia and Fort Beauséjour National Park in New Brunswick, surround sites notable in early Canadian history.

A recent addition to Canada's National Park system is the Cape Breton Highlands National Park, an area of 458 square miles, situated on the northern limits of Cape Breton island, Nova Scotia. An area of approximately 10 square miles has also been set aside as a national park on the north shore of Prince Edward island.

The special animal parks were established for the protection of such vanishing species of mammalian wild life as the buffalo, wapiti (elk), and pronghorned antelope, which now thrive under natural conditions in large enclosures especially suited to their requirements. These parks include the Buffalo and Elk Island parks in Alberta, which contain large herds of buffalo, elk, moose, and deer, and the Nemiskam and Wawaskesy parks also in Alberta, which form sanctuaries for the pronghorned antelope.

In the national parks all wild life is given rigid protection and primal natural conditions are maintained as far as possible. The local administration of the larger parks is carried out by resident superintendents, assisted by park wardens who are responsible for the necessary game and forest patrols. Recreational facilities are many and varied, and in some parks natural attractions have been augmented by the provision of golf courses, tennis courts, swimming pools, bath-houses, and other features. A number of the parks also possess well-equipped motor camp grounds, which are available to visitors desiring this type of accommodation.

The national parks of Canada are accessible either by railway or motor highway. In addition to being served by the Canadian Pacific or Canadian National

* Prepared under the direction of F. H. H. Williamson, Controller, National Parks Bureau, Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa.

Railway systems, most of the parks are either traversed by or linked up with the main arteries of motor travel. More than 600 miles of all-weather motor roads have been built by the National Parks Bureau, which have been instrumental in opening up many of the outstanding beauty spots, while other regions have been made accessible by the construction of more than 2,000 miles of trails.

Migratory Birds Treaty.—This treaty and the legislation making it effective throughout Canada are administered by the National Parks Bureau of the Department of Mines and Resources. The treaty, which has been effective since 1916, has as its object the protection of the valuable migratory bird life of Canada and the United States. Information concerning the treaty, and regulations enacted for its enforcement, may be obtained from the Controller, National Parks Bureau, Ottawa.

Provincial Parks.—In addition to the national parks throughout Canada administered by the Dominion Government, most of the provinces also maintain provincial parks for the protection of wild life and as recreational areas. Among the largest of these are the Algonquin Park (2,740 square miles) in Ontario, and the Laurentides Park (3,565 square miles) in Quebec.

2.—Details Regarding Locations, Dates Established, Areas, and Characteristics of the National Parks of Canada and Dominion Reserves, 1937.

(Twenty-two in number with a total area of 29,831 square miles.)

Park.	Location.	Date Estab- lished.	Area. sq. miles.	Characteristics.
Scenic Parks.				
Banff.....	Western Alberta, on east slope of Rockies.	1885	2,585-00	Mountain playground containing two famous resorts—Banff and Lake Louise. Massive ranges, upper slopes bare and worn, or glacier crowned, lower slopes covered with luxuriant forests and flowered alplands; glacier-fed lakes. Wild deer, goat, sheep, elk, etc. Recreations—alpine climbing, riding, swimming, golf, tennis, motoring, fishing, skiing, skating, curling.
Yoho.....	Eastern British Columbia, on west slope of Rockies.	1886	507-00	Rugged scenery on west slope of Rockies; Kicking Horse valley; lofty peaks, large number with permanent ice-caps or glaciers; famous Yoho valley with numerous waterfalls, one over 1,200 feet in height. Natural bridge, Emerald lake, lakes O'Hara and McArthur.
Glacier.....	Southeastern British Columbia, on the summit of the Selkirk range.	1886	521-00	Massive formations of the old Selkirk range; luxuriant forests, alpine flower gardens. Centre for alpine climbers. Illecillewaet and Asulkan glaciers and valleys; Nakimu caves. Marion lake, Rogers and Baloo passes.
Mount Revelstoke....	Southeastern British Columbia, on the summit of mount Revelstoke.	1914	100-00	Nineteen-mile drive up Mt. Revelstoke affording panoramic views of the Columbia and Illecillewaet valleys, Clachnacudainn ice-field, lakes Eva and Millar. Game sanctuary and winter sports resort.
Kootenay.....	Southeastern British Columbia, along Banff-Windermere highway.	1920	587-00	Park extends five miles on each side of Vermilion-Sinclair section of Banff-Windermere highway. Deep canyons, Iron Gates, Briscoe range, Sinclair canyon, famed Radium Hot Springs. Bear, deer, caribou, and Rocky Mountain sheep.

2.—Details Regarding Locations, Dates Established, Areas, and Characteristics of the National Parks of Canada and Dominion Reserves, 1937—continued.

Park.	Location.	Date Established.	Area.	Characteristics.
			sq. miles.	
Scenic Parks—con.				
Jasper.....	Western Alberta, on east slope of Rockies.	1907	4,200.00	Immense mountain wilderness, rich in historical associations. Numbers of unclimbed peaks; glaciers, snowfields, canyons, lakes of wonderful colouring; Athabaska valley, Maligne lake, Mount Edith Cavell; Miette Hot Springs; big game sanctuary. Recreations—alpine climbing, riding, swimming, golf, tennis, motoring, fishing.
Waterton Lakes.....	Southern Alberta, adjoining Glacier Park in Montana, U.S.A.	1895	220.00	Canadian section, Waterton-Glacier International Peace Park. Mountains noted for beauty of colouring; lovely lakes, picturesque trails, waterfalls, trout fishing, camping, Government golf course.
St. Lawrence Islands.	In St. Lawrence river between Morrisburg and Kingston, Ontario.	1904	185.60 (acres)	Thirteen islands among the "Thousand Islands" in the St. Lawrence river. Recreational area, camping, fishing.
Point Pelee.....	Southern Ontario, on lake Erie.	1918	6.04	Most southerly mainland point in Canada, 41° 54' N. Resting place of many migratory birds; unique flora. Recreational area, camping, bathing.
Georgian Bay Islands (including Flowerpot Island Reserve)	In Georgian bay, near Midland, Ontario.	1929	5.37	Thirty islands in Georgian Bay; Beausoleil, largest of the group, is a popular camping resort. Fine bathing beaches, beautiful groves of trees, varied bird and plant life. Flowerpot island, at head of Bruce peninsula, has interesting limestone formations and numerous caves.
Riding Mountain.....	Southwestern Manitoba, west of lake Winnipeg.	1929	1,148.04	Rolling woodland country in western Manitoba dotted with several beautiful lakes. Natural home of big game including one of the largest herds of wild elk in Canada. Summer resort, fine bathing and camping, Government golf course.
Prince Albert.....	Central Saskatchewan, north of Prince Albert.	1927	1,869.00	Forest country of northwestern Canada, birch, spruce, jack pine, poplar; lakes and streams; moose, deer, bear, beaver, and interesting bird life. Excellent fishing—northern pike, pickerel, and lake trout; summer resort; sand beaches, campgrounds, Government golf course.
Cape Breton Highlands.	Northern part of Cape Breton island.	1936	458.00	Outstanding examples of rugged coast-line with mountain background. Magnificent views of Atlantic ocean and gulf of St. Lawrence.
Area in Prince Edward Island.	North shore of Prince Edward island.	1936	10.00 (approx.)	Strip approximately twenty miles long on north shore. Some of finest bathing beaches in Eastern Canada.
National Parks Tar Sands Reservation. ¹	Alberta.....	1926	2,068.20 (acres)	Four areas comprising in all 2,068 acres in the Fort McMurray District, Alberta, have been reserved for the National Parks Branch to provide a supply of tar sands for road construction purposes in the National Parks.
Animal Parks and Reserves.				
Buffalo.....	Eastern Alberta, near Wainwright.	1908	197.50	Fenced enclosure; home of the Dominion Government buffalo herd. Over 5,000 buffalo, also moose, deer, elk, yak, and hybrids.

2.—Details Regarding Locations, Dates Established, Areas, and Characteristics of the National Parks of Canada and Dominion Reserves, 1937—concluded.

Park.	Location.	Date Estab- lished.	Area.	Characteristics.
Animal Parks and Reserves—concl.			sq. miles.	
Elk Island.....	Central Alberta, near Lamont.	1911	51.00	Fenced enclosure, containing over 2,000 buffalo, also moose, elk, and deer; recreational area, camping, bathing. Government golf course.
Nemiskam.....	Southern Alberta, near Foremost.	1922	8.50	Fenced pronghorned antelope reserve, containing more than 300 head of this interesting animal, a species indigenous to the region.
Wawaskesy.....	Southeastern Alber- ta.	1922	54.00	Antelope reserve, as yet undeveloped.
Wood Buffalo ²	Partly in Alberta (13,675 sq. miles) and partly in Northwest Terri- tories (3,625 sq. miles), west of Athabaska and Slave rivers.	1922	17,300.00	Forests interspersed with rivers and open plains. Dotted with innumerable lakes and streams. The home of the wood buffalo, moose, deer, caribou, bear, beaver; waterfowl abundant. Area as yet undeveloped.
Historic Parks.				
Fort Anne.....	Nova Scotia..... (Annapolis Royal)	1917	31.00 (acres)	National Historic Park—site of early Acadian settlement of Port Royal; museum containing interesting relics of early days and fine historical library.
Fort Beauséjour.....	New Brunswick, near Sackville.	1926	59.00 (acres)	National Historic Park—site of old French fort erected middle of 18th century. Renamed Fort Cumberland in 1755 by British; original name was later restored. Historical museum containing interesting exhibits.

¹ Reserved by Order in Council and became a Dominion reserve by agreement with the province of Alberta in 1931.

² Administered by the Bureau of Northwest Territories and Yukon Affairs of the Lands, Parks, and Forests Branch, Department of Mines and Resources.

Game and Scenery.—Canada's resources as a country for the sportsman and tourist are both unique and varied. Owing to the growth of tourist travel and its demands (the statistics of the tourist trade are dealt with in Chapter XVI as a phase of External Trade), great areas of uninhabited land have become accessible, and hitherto almost unknown parts may now be reached and traversed with ease. In the wooded and unsettled areas of every province there are many moose, deer, bear, and smaller game, while in the western parts of the Dominion there are also wapiti, caribou, mountain sheep, mountain goat, grizzly bear, and lynx. Mountain lion, or cougar, are found in British Columbia and in the mountains of Alberta, while in the northwest and the far north there still exist herds of buffalo and musk-ox, which, however, are given absolute protection by the Dominion Government.

Ruffed and spruce grouse are found in the wooded areas of Canada from coast to coast. Prairie chicken and Hungarian partridge inhabit the open prairies and the partly timbered areas of the three mid-western provinces. Franklin grouse are native to the mountains of the west and the ptarmigan, an Arctic grouse, lives in the treeless northern plains and is also found in the high mountains of Alberta and British Columbia.

Canada is the natural habitat of many kinds of waterfowl and it is difficult to imagine any finer field for the shot-gun sportsman than is afforded by many of the myriad lakes which form so large a feature of Canadian scenery. This is particularly true of the three mid-western provinces, where the lakes are of the shallow, surface type that furnishes the most abundant feed for waterfowl.

The valleys of Nova Scotia and New Brunswick, the broken lake country of northern Ontario and Quebec, northern Manitoba and Saskatchewan, as well as the mountain districts of British Columbia, offer to the tourist, the hunter and the fisherman new scenic effects and innumerable game preserves, and have won for the Dominion a reputation as a paradise for sportsmen and campers. And not only is this possible for those who travel by land; the series of lakes and rivers which form a network over the eastern part of the country particularly, has made water travel in smaller craft both feasible and attractive. Further, facilities for winter sports, the unusual attractions of winter scenery and the bracing though rigorous winter climate, have done much to add to the reputations of resorts formerly noted for their advantages in the summer season. In both Dominion and provincial parks, the hunting of game is forbidden, and the wild-life resources preserved. Elsewhere, however, there is available for the hunter and angler, at proper seasons, a wealth of game species.

PART VII.—CLIMATE AND METEOROLOGY.

Section 1.—The Climate of Canada.

An article on this subject by Sir Frederic Stupart, at that time Director of the Dominion Meteorological Service, Toronto, appeared in the 1929 edition of the Year Book at pp. 42-51.

Section 2.—The Factors which Control Canadian Weather.

Under the above heading, Sir Frederic Stupart, at that time Director of the Dominion Meteorological Service, Toronto, contributed an article which appeared at pp. 26-31 of the 1924 edition of the Year Book, also at pp. 36-40 of the 1925 edition.

Section 3.—The Distribution of Precipitation in Canada.

An article on "The Distribution of Precipitation in Canada", contributed by A. J. Connor, Climatologist, Dominion Meteorological Office, Toronto, appeared at pp. 42-46 of the 1926 edition of the Year Book.

Section 4.—The Temperature and Precipitation of Northern Canada.

An article on the climate of northern Canada, accompanied by meteorological tables showing the normal temperature and precipitation at selected northern stations, was contributed by A. J. Connor, of the Meteorological Service of the Department of Marine, Toronto, to the 1930 edition of the Year Book, where it will be found at pp. 41-56.

Section 5.—The Meteorological Service of Canada.

Under the above heading Sir Frederic Stupart contributed a short article descriptive of the growth and present activities of the Meteorological Service, to the 1922-23 edition of the Year Book (pp. 43-47); to it the interested reader is referred.

Section 6.—Meteorological Tables.

Tables showing the normal temperature and precipitation at selected Canadian stations in each of the provinces, together with the recorded extremes, also the averages of sunshine, wind, and weather at such stations, will be found at pp. 51-63, inclusive, of the 1927-28 edition of the Year Book. The 1931 edition of the Year Book contains at pp. 48-76 additional and more comprehensive tables, contributed by A. J. Connor, of monthly average temperatures and precipitation throughout Canada, as well as of normal snowfall and duration of bright sunshine.

Times of Sunrise and Sunset in Canada.*—The table between pp. 68 and 69 gives the times of sunrise and sunset for places in latitudes 44°, 46°, 48°, 50°, and 52°. These latitudes cover what is pretty well the populated belt across Canada.

Times are given in mean solar time. The moment when the sun is over the meridian which passes through a certain place is not constant on any two consecutive days and a clock cannot be constructed to keep true meridian time. For this reason, mean or average time is used. It will be clear that no two places, unless they are exactly on the same meridian of longitude, have either the same meridian time or the same mean time. It follows that, for convenience in every-day life and to facilitate transportation schedules, a system of standard time has to be adopted.

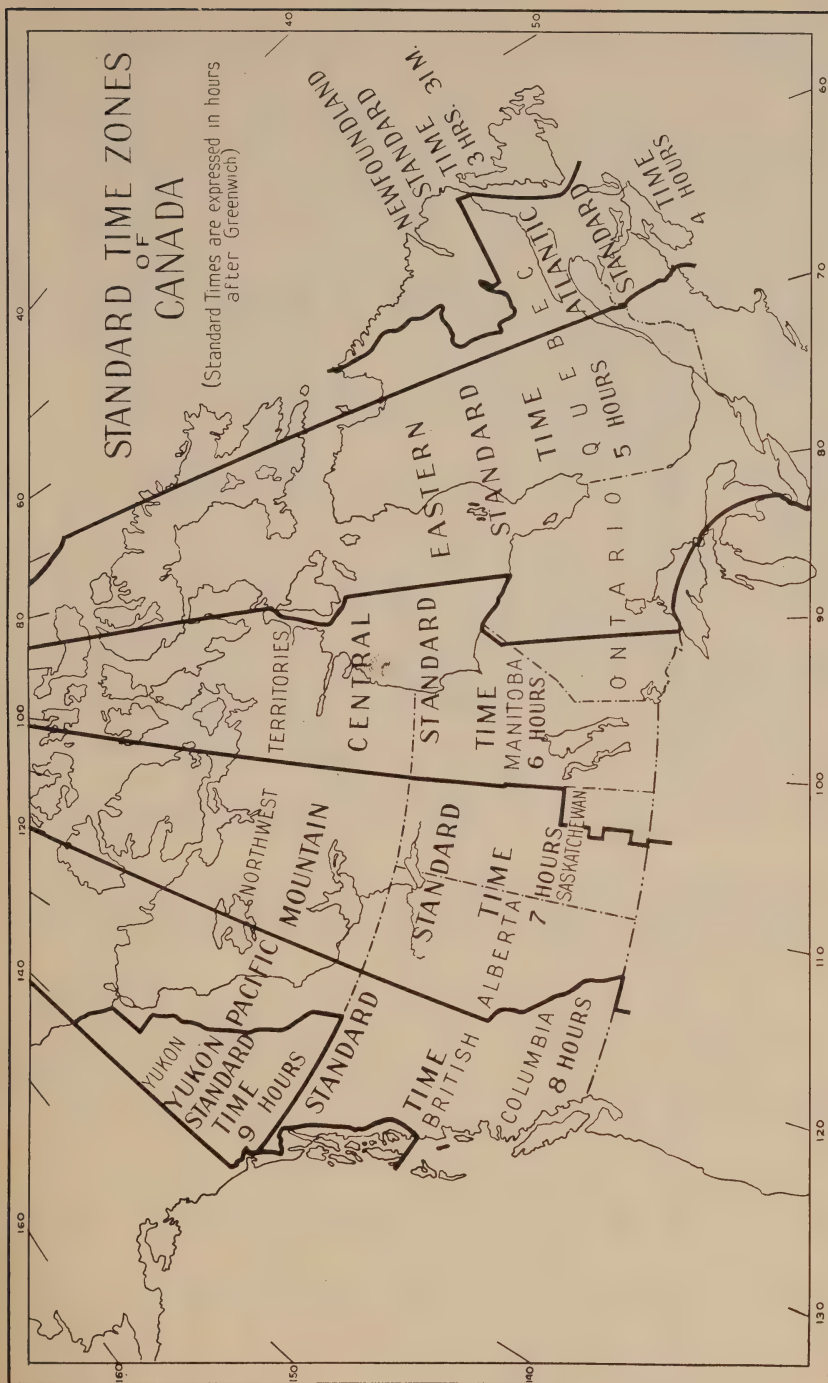
The surface of the earth is divided into belts each of which extends approximately $7\frac{1}{2}$ degrees east and west of a central meridian whose local time is an exact number of hours from Greenwich time. These central meridians are, of course, 15°, 30°, 45°, etc. from Greenwich. On the ocean the boundaries of the belts are also true meridians, but on the land they are drawn to suit local circumstances. An examination of the map on page 67 will show this.

Within a certain belt or zone all the clocks are set to show the same time, and in passing from one such zone to another the hands of the clock are moved forward or backward one hour.

In Canada we have six standard time zones, as follows: the Atlantic (or 60th Meridian) Time Zone, which is 4 hours slower than Greenwich; the Eastern (or 75th Meridian) Time Zone, which is 5 hours behind Greenwich; the Central (or 90th Meridian) Time Zone, which is 6 hours behind; the Mountain (or 105th Meridian) Time Zone, which is 7 hours behind; the Pacific (or 120th Meridian) Time Zone, which is 8 hours behind; and the Yukon (or 135th Meridian) Time Zone, 9 hours slower than Greenwich. The boundaries of the zones are laid down in the Statutes of the several provinces and territories and are shown on the map.

Since, as stated, the tables are given in mean solar time for the five latitudes named, correction must be made, according to the following instructions, to change these times to standard or railroad times of cities and towns in the respective latitudes.

* By permission of the Royal Astronomical Society of Canada, the calculations facing p. 68 and instructions for correction given below are reproduced from *The Observers' Handbook*, 1931, published by the Society.



Instructions.—In order to find the standard time of sunrise and sunset for any place on any day, first, from the list below, find the approximate latitude of the place from its position in relation to one of the cities listed and the correction, in minutes, which follows the name. Then find in the monthly table the time of sunrise and sunset for the proper latitude, on the desired day, and apply the correction.

44°	46°	48°	50°	52°
min.	min.	min.	min.	min.
Barrie.....+17	Charlotte-	Port Arthur..+57	Brandon.....+40	Calgary.....+36
Brantford.....+21	town.....+13	Victoria.....+13	Indian Head..- 5	Edmonton.....+34
Chatham.....+29	Fredericton...+26		Kamloops.....+ 2	Prince Albert..+ 4
Goderich.....+27	Montreal.....- 6		Kenora.....+18	Saskatoon.....+ 6
Guelph.....+21	Ottawa.....+ 3		Medicine Hat..+22	
Halifax.....+14	Parry Sound..+20		Moosejaw.....+ 2	
Hamilton.....+20	Quebec.....-15		Moosomin.....+40	
Kingston.....+ 6	Sherbrooke...-12		Nelson.....-11	
London.....+25	Saint John....+24		Portage la	
Orillia.....+18	Sydney.....+ 1		Prairie.....+33	
Owen Sound....+24	Three Rivers.-10		Regina.....- 2	
Peterboro.....+13			Vancouver....+12	
Port Hope.....+14			Winnipeg.....+28	
Stratford.....+24				
Toronto.....+18				
Windsor.....+32				
Woodstock.....+23				
Yarmouth.....+24				

Example.—Find the time of sunrise at Owen Sound, also at Regina, on Feb. 11. In the above list Owen Sound is under “44°”, and the correction is +24 min. On the table between pp. 68-69 the time of sunrise on Feb. 11 for latitude 44° is 7·05; add 24 min. and we get 7·29 (Eastern Standard Time). Regina is under “50°”, and the correction is -2 min. From the table the time is 7·18 and subtracting 2 min. we get the time of sunrise 7·16 (Mountain Standard Time).

Section 7.—Droughts in Western Canada.

An article on the above subject by A. J. Connor, of the Meteorological Service of the Department of Marine, Toronto, accompanied by diagrams and tables showing the precipitation and sun-spot incidence in the Prairie Provinces, appeared at pp. 47-59 of the 1933 edition of the Year Book.

Section 8.—Standard Time and Time Zones in Canada.

A summary, based on a paper “Standard Time and Time Zones in Canada” by C. C. Smith, Dominion Observatory, Ottawa, accompanied by a map diagram, appeared at pp. 50-53 of the 1934-35 edition of the Year Book.

DAILY TABLES OF SUNRISE FOR PLACES IN LATITUDES 44°, 46°, 48°, 50°, AND 52°.

(Mean Solar Time.)

Day of Month.	January.												February.												March.												Day of Month.								
	Latitude 44°.			Latitude 46°.			Latitude 48°.			Latitude 50°.			Latitude 52°.			Latitude 44°.			Latitude 46°.			Latitude 48°.			Latitude 50°.			Latitude 52°.																	
	Sun-rise.	Sun-set.	h. m.	Sun-rise.	Sun-set.	h. m.	Sun-rise.	Sun-set.	h. m.	Sun-rise.	Sun-set.	h. m.	Sun-rise.	Sun-set.	h. m.	Sun-rise.	Sun-set.	h. m.	Sun-rise.	Sun-set.	h. m.	Sun-rise.	Sun-set.	h. m.	Sun-rise.	Sun-set.	h. m.	Sun-rise.	Sun-set.	h. m.	Sun-rise.	Sun-set.	h. m.	Sun-rise.	Sun-set.	h. m.		Sun-rise.	Sun-set.	h. m.					
1	7 35	4 33	7	7 42	4 26	7	7 50	4 18	7	7 59	4 09	8	8 08	4 00	8	7 17	5 10	7	7 22	5 05	7	7 28	5 00	7	7 33	4 54	7	7 38	4 48	6	6 37	5 48	6	6 39	5 46	6	6 41	5 44	6	6 43	5 42	6	6 43	5 41	1
2	7 35	4 34	7	7 42	4 26	7	7 50	4 19	7	7 59	4 08	8	8 08	4 00	8	7 16	5 12	7	7 21	5 07	7	7 26	5 01	7	7 32	4 50	7	7 37	4 44	6	6 35	5 49	6	6 37	5 47	6	6 39	5 45	6	6 41	5 43	6	6 42	5 42	2
3	7 35	4 35	7	7 42	4 27	7	7 50	4 20	7	7 59	4 10	8	8 08	4 02	8	7 15	5 13	7	7 20	5 08	7	7 25	5 03	7	7 30	4 58	7	7 36	4 52	6	6 34	5 50	6	6 36	5 49	6	6 37	5 48	6	6 39	5 46	6	6 40	5 45	3
4	7 35	4 36	7	7 42	4 28	7	7 50	4 21	7	7 58	4 12	8	8 07	4 03	9	7 13	5 17	7	7 18	5 12	7	7 22	5 06	7	7 27	4 51	7	7 33	4 45	6	6 30	5 53	6	6 31	5 52	6	6 33	5 50	6	6 35	5 48	6	6 36	5 47	4
5	7 35	4 37	7	7 42	4 29	7	7 50	4 22	7	7 58	4 13	8	8 07	4 04	10	7 13	5 17	7	7 18	5 12	7	7 22	5 06	7	7 27	4 50	7	7 31	4 44	6	6 28	5 55	6	6 30	5 53	6	6 31	5 51	6	6 33	5 50	6	6 34	5 49	5
6	7 35	4 38	7	7 42	4 30	7	7 49	4 23	7	7 58	4 14	8	8 06	4 05	11	7 12	5 17	7	7 17	5 12	7	7 21	5 06	7	7 26	4 50	7	7 31	4 44	6	6 26	5 56	6	6 28	5 54	6	6 29	5 53	6	6 31	5 52	6	6 32	5 51	6
7	7 34	4 39	7	7 42	4 32	7	7 49	4 24	7	7 58	4 16	8	8 06	4 07	12	7 10	5 18	7	7 15	5 14	7	7 19	5 09	7	7 24	4 53	7	7 29	4 47	6	6 23	5 57	6	6 25	5 56	6	6 27	5 54	6	6 29	5 52	6	6 30	5 51	7
8	7 34	4 40	7	7 41	4 33	7	7 49	4 25	7	7 57	4 17	8	8 05	4 08	7	7 09	5 20	7	7 13	5 15	7	7 18	5 10	7	7 23	4 54	7	7 28	4 48	6	6 23	5 57	6	6 25	5 56	6	6 27	5 54	6	6 29	5 52	8	6 30	5 51	8
9	7 34	4 41	7	7 41	4 34	7	7 49	4 26	7	7 57	4 18	8	8 05	4 09	7	7 08	5 21	7	7 12	5 17	7	7 16	5 13	7	7 21	4 55	7	7 26	4 49	6	6 23	5 58	6	6 24	5 57	6	6 26	5 55	6	6 28	5 53	9	6 29	5 52	9
10	7 34	4 42	7	7 41	4 35	7	7 48	4 27	7	7 56	4 19	8	8 04	4 11	7	7 06	5 23	7	7 10	5 18	7	7 15	5 14	7	7 19	4 56	7	7 23	4 50	6	6 21	6 00	6	6 22	5 59	6	6 23	5 57	6	6 25	5 56	10			
11	7 34	4 43	7	7 40	4 36	7	7 48	4 29	7	7 56	4 21	8	8 04	4 12	7	7 05	5 24	7	7 10	5 19	7	7 13	5 16	7	7 18	4 57	7	7 22	4 51	6	6 19	6 01	6	6 20	6 00	6	6 21	5 59	6	6 22	5 58	6	6 23	5 57	11
12	7 33	4 44	7	7 40	4 38	7	7 47	4 30	7	7 55	4 22	8	8 03	4 14	7	7 03	5 25	7	7 08	5 21	7	7 12	5 17	7	7 16	4 58	7	7 20	4 52	6	6 18	6 02	6	6 18	6 01	6	6 19	6 00	6	6 20	5 59	12			
13	7 33	4 45	7	7 39	4 39	7	7 47	4 31	7	7 55	4 23	8	8 02	4 15	7	7 02	5 27	7	7 06	5 23	7	7 10	5 19	7	7 14	4 59	7	7 18	4 53	6	6 16	6 04	6	6 16	6 03	6	6 17	6 02	6	6 18	6 01	13			
14	7 32	4 46	7	7 39	4 40	7	7 46	4 33	7	7 54	4 25	8	8 01	4 17	7	7 01	5 28	7	7 04	5 24	7	7 08	5 21	7	7 12	4 60	7	7 16	4 54	6	6 14	6 05	6	6 15	6 04	6	6 16	6 03	6	6 17	6 02	14			
15	7 32	4 48	7	7 38	4 41	7	7 45	4 34	7	7 53	4 26	8	8 00	4 19	6	6 59	5 29	7	7 03	5 26	7	7 06	5 22	7	7 10	4 61	7	7 14	4 55	6	6 12	6 06	6	6 13	6 05	6	6 13	6 05	6	6 14	6 04	15			
16	7 31	4 49	7	7 38	4 42	7	7 45	4 36	7	7 52	4 28	8	8 00	4 21	6	6 58	5 31	7	7 05	5 27	7	7 08	5 24	7	7 09	4 62	7	7 12	4 56	6	6 10	6 07	6	6 11	6 07	6	6 11	6 06	6	6 11	6 06	16			
17	7 30	4 50	7	7 37	4 44	7	7 44	4 37	7	7 51	4 29	8	7 59	4 23	6	6 56	5 32	7	7 03	5 26	7	7 06	5 23	7	7 07	4 63	7	7 10	4 57	6	6 09	6 08	6	6 09	6 08	6	6 09	6 07	6	6 09	6 07	17			
18	7 30	4 52	7	7 36	4 45	7	7 43	4 38	7	7 51	4 31	7	7 58	4 24	6	6 55	5 34	7	7 01	5 27	7	7 04	5 23	7	7 05	4 64	7	7 08	4 58	6	6 07	6 10	6	6 10	6 09	6	6 10	6 08	6	6 10	6 07	18			
19	7 29	4 53	7	7 35	4 47	7	7 42	4 40	7	7 50	4 32	7	7 57	4 26	6	6 53	5 35	6	6 56	5 32	6	6 59	5 29	7	7 03	4 65	7	7 07	4 59	6	6 05	6 11	6	6 05	6 11	6	6 05	6 11	6	6 05	6 12	19			
20	7 28	4 54	7	7 34	4 48	7	7 41	4 41	7	7 49	4 34	7	7 56	4 28	6	6 52	5 36	6	6 54	5 33	6	6 58	5 30	7	7 01	4 67	7	7 05	4 61	6	6 03	6 12	6	6 03	6 12	6	6 03	6 12	6	6 03	6 13	20			
21	7 28	4 55	7	7 34	4 49	7	7 40	4 43	7	7 48	4 36	7	7 55	4 29	6	6 50	5 38	6	6 53	5 35	6	6 56	5 32	6	6 59	4 68	7	7 03	4 62	6	6 01	6 13	6	6 01	6 14	6	6 01	6 14	6	6 01	6 15	21			
22	7 27	4 56	7	7 33	4 50	7	7 40	4 44	7	7 46	4 37	7	7 54	4 31	6	6 48	5 39	6	6 51	5 36	6	6 54	5 33	6	6 57	4 70	7	7 00	4 64	6	6 01	6 14	6	6 01	6 15	6	6 01	6 15	6	6 01	6 16	22			
23	7 26	4 58	7	7 32	4 52	7	7 39	4 46	7	7 45	4 39	7	7 52	4 32	6	6 47	5 40	6	6 49	5 38	6	6 52	5 35	6	6 55	4 72	7	7 00	4 66	6	6 04	6 16	6	6 04	6 16	6	6 04	6 17	6	6 04	6 17	23			
24	7 25	4 59	7	7 31	4 54	7	7 38	4 47	7	7 44	4 41	7	7 51	4 34	6	6 45	5 42	6	6 47	5 39	6	6 50	5 36	6	6 53	4 74	7	7 01	4 69	6	6 03	6 17	6	6 03	6 18	6	6 03	6 19	6	6 03	6 20	24			
25	7 25	5 01	7	7 30	4 55	7	7 36	4 49	7	7 43	4 42	7	7 50	4 36	6	6 44	5 43	6	6 46	5 41	6	6 49	5 38	6	6 51	4 75	7	7 01	4 70	6	6 03	6 18	6	6 03	6 19	6	6 03	6 20	6	6 03	6 21	25			
26	7 24	5 02	7	7 29	4 56	7	7 35	4 50	7	7 42	4 44	7	7 49	4 38	6	6 42	5 44	6	6 44	5 42	6	6 47	5 39	6	6 49	4 76	7	7 01	4 71	6	6 02	6 19	6	6 02	6 20	6	6 02	6 21	6	6 02	6 22	26			
27	7 23	5 03	7	7 28	4 57	7	7 34	4 51	7	7 41	4 44	7	7 48	4 39	6	6 40	5 45	6	6 43	5 43	6	6 46	5 40	6	6 48	4 77	7	7 01	4 72	6	6 01	6 20	6	6 01	6 21	6	6 01	6 22	6	6 01	6 23	27			
28	7 22	5 05	7	7 27	4 59	7	7 33	4 54	7	7 39	4 47	7	7 46	4 41	6	6 38	5 47	6	6 41	5 45	6	6 43	5 42	6	6 45	4 78	7	7 01	4 73	6	6 00	6 22	6	6 00	6 23	6	6 00	6 24	6	6 00	6 25	28			
29	7 21	5 06	7	7 26	5 01	7	7 32	4 55	7	7 38	4 49	7	7 45	4 43	6	6 37	5 48	6	6 41	5 46	6	6 43	5 44	6	6 45	4 79	7	7 01	4 74	6	6 00	6 23	6	6 00	6 24	6	6 00	6 25	6	6 00	6 26	29			
30	7 20	5 08	7	7 25	5 03	7	7 30	4 57	7	7 36	4 51	7	7 43	4 44	6	6 36	5 49	6	6 43	5 47	6	6 45	5 46	6	6 47	4 80	7	7 01	4 75	6	6 00	6 24	6	6 00	6 25	6	6 00	6 26	6	6 00	6 27	30			
31	7 18	5 09	7	7 23	5 04	7	7 29	4 58	7	7 35	4 52	7	7 42	4 46	6	6 34	5 50	6	6 41	5 49	6	6 43	5 48	6	6 45	4 81	7	7 01	4 76	6	6 00	6 25	6	6 00	6 26	6	6 00	6 27	6	6 00	6 28	31			
May.																																													
1	5 41	6 27	5	6 40	6 28	5	6 38	6 30																																					

DAILY TIMES OF SUNRISE AND SUNSET FOR PLACES IN LATITUDES 44°, 46°, 48°, 50°, AND 52°—CONCLUDED.

(Mean Solar Time.)

Day of Month.	July.										August.										September.										Day of Month.	
	Latitude 44°.		Latitude 46°.		Latitude 48°.		Latitude 50°.		Latitude 52°.		Latitude 44°.		Latitude 46°.		Latitude 48°.		Latitude 50°.		Latitude 52°.		Latitude 44°.		Latitude 46°.		Latitude 48°.		Latitude 50°.		Latitude 52°.			
	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.		
	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.		
1	4 21	7 47	4 13	7 54	4 04	8 03	3 55	8 12	3 44	8 23	4 48	7 24	4 42	7 30	4 36	7 36	4 29	7 43	4 21	7 50	5 23	6 36	5 20	6 39	5 18	6 42	5 15	6 43	5 11	6 49	2	
2	4 21	7 46	4 13	7 54	4 05	8 02	3 56	8 12	3 45	8 22	4 47	7 23	4 42	7 29	4 36	7 35	4 28	7 42	4 20	7 49	5 23	6 35	5 20	6 38	5 18	6 41	5 15	6 42	5 11	6 48	3	
3	4 22	7 46	4 14	7 54	4 06	8 02	3 57	8 11	3 46	8 21	4 50	7 22	4 45	7 27	4 39	7 33	4 32	7 40	4 24	7 47	5 25	6 33	5 23	6 35	5 21	6 38	5 18	6 40	5 15	6 44	4	
4	4 23	7 46	4 15	7 54	4 06	8 02	3 58	8 11	3 47	8 21	4 52	7 19	4 47	7 26	4 41	7 30	4 35	7 37	4 28	7 43	5 27	6 31	5 24	6 33	5 22	6 36	5 20	6 38	5 17	6 42	5	
5	4 23	7 46	4 15	7 53	4 07	8 02	3 58	8 11	3 48	8 21	4 52	7 19	4 47	7 26	4 41	7 30	4 35	7 37	4 28	7 43	5 28	6 29	5 26	6 31	5 23	6 34	5 21	6 36	5 19	6 39	6	
6	4 24	7 45	4 16	7 53	4 08	8 01	3 59	8 10	3 48	8 20	4 53	7 18	4 48	7 23	4 43	7 29	4 36	7 35	4 29	7 41	5 29	6 28	5 27	6 29	5 25	6 32	5 23	6 34	5 20	6 37	7	
7	4 25	7 45	4 17	7 52	4 10	8 00	4 00	8 09	3 49	8 19	4 54	7 17	4 49	7 22	4 44	7 27	4 38	7 34	4 31	7 40	5 30	6 26	5 28	6 27	5 26	6 30	5 24	6 32	5 22	6 34	8	
8	4 25	7 44	4 18	7 52	4 10	8 00	4 00	8 09	3 49	8 19	4 56	7 15	4 51	7 20	4 45	7 26	4 39	7 32	4 32	7 38	5 31	6 24	5 30	6 26	5 27	6 28	5 25	6 30	5 24	6 32	9	
9	4 26	7 43	4 19	7 51	4 11	7 59	4 02	8 08	3 50	8 18	4 57	7 14	4 52	7 19	4 46	7 24	4 40	7 30	4 34	7 36	5 32	6 22	5 31	6 24	5 28	6 25	5 27	6 25	5 26	6 30	10	
10	4 27	7 43	4 20	7 50	4 12	7 59	4 03	8 07	3 53	8 17	4 59	7 11	4 54	7 16	4 49	7 21	4 44	7 26	4 37	7 32	5 34	6 19	5 33	6 20	5 31	6 22	5 30	6 23	5 29	6 25	11	
11	4 28	7 42	4 21	7 50	4 13	7 58	4 04	8 07	3 54	8 16	5 00	7 09	4 56	7 15	4 51	7 19	4 45	7 25	4 39	7 30	5 36	6 17	5 34	6 18	5 33	6 20	5 31	6 21	5 30	6 23	12	
12	4 29	7 42	4 22	7 49	4 14	7 57	4 05	8 06	3 56	8 15	5 02	7 08	4 57	7 12	4 52	7 17	4 47	7 23	4 40	7 28	5 37	6 15	5 36	6 16	5 34	6 17	5 33	6 19	5 32	6 21	13	
13	4 29	7 41	4 23	7 48	4 15	7 56	4 06	8 05	3 57	8 14	5 03	7 06	4 58	7 11	4 53	7 16	4 48	7 21	4 42	7 26	5 38	6 13	5 37	6 14	5 36	6 15	5 34	6 17	5 33	6 18	14	
14	4 30	7 40	4 24	7 47	4 16	7 56	4 07	8 04	3 58	8 13	5 04	7 05	4 59	7 09	4 55	7 14	4 50	7 19	4 44	7 24	5 39	6 11	5 38	6 12	5 37	6 13	5 36	6 14	5 35	6 16	15	
15	4 31	7 40	4 24	7 47	4 17	7 55	4 08	8 03	3 59	8 12	5 05	7 03	4 59	7 08	4 56	7 12	4 51	7 17	4 45	7 22	5 40	6 09	5 39	6 10	5 38	6 11	5 38	6 12	5 36	6 14	16	
16	4 32	7 39	4 26	7 46	4 18	7 54	4 10	8 02	4 00	8 11	5 07	7 02	5 03	7 06	4 57	7 10	4 53	7 15	4 47	7 20	5 42	6 08	5 41	6 08	5 40	6 09	5 39	6 10	5 38	6 11	17	
17	4 33	7 38	4 27	7 45	4 19	7 53	4 11	8 01	4 02	8 10	5 08	7 00	5 04	7 04	4 58	7 09	4 54	7 13	4 48	7 18	5 43	6 06	5 42	6 07	5 40	6 08	5 41	6 08	5 39	6 10	18	
18	4 34	7 38	4 28	7 44	4 20	7 52	4 12	8 00	4 03	8 09	5 10	6 57	5 06	7 01	5 02	7 05	4 57	7 09	4 52	7 14	5 45	6 02	5 45	6 02	5 44	6 03	5 43	6 03	5 42	6 04	19	
19	4 37	7 36	4 30	7 42	4 23	7 50	4 15	7 58	4 05	8 07	5 11	6 55	5 07	6 59	5 03	7 03	4 59	7 07	4 53	7 12	5 46	6 00	5 46	6 00	5 45	6 01	5 45	6 01	5 44	6 02	20	
20	4 38	7 35	4 31	7 41	4 24	7 49	4 16	7 57	4 06	8 06	5 12	6 54	5 08	6 58	5 04	7 02	4 59	7 06	4 55	7 10	5 47	5 58	5 47	5 58	5 45	6 02	5 46	5 59	5 45	6 00	21	
21	4 39	7 34	4 32	7 40	4 25	7 48	4 17	7 56	4 08	8 05	5 13	6 52	5 09	6 56	5 05	7 00	4 58	7 04	4 55	7 13	5 48	5 56	5 48	5 59	5 46	6 03	5 47	5 58	5 46	6 00	22	
22	4 40	7 33	4 33	7 39	4 26	7 47	4 18	7 54	4 10	8 02	5 14	6 50	5 11	6 54	5 07	6 55	5 03	7 01	4 58	7 06	5 49	5 55	5 50	5 54	5 50	5 48	5 54	5 49	5 55	5 49	23	
23	4 40	7 32	4 34	7 38	4 27	7 46	4 20	7 53	4 11	8 01	5 15	6 49	5 12	6 52	5 08	6 56	5 04	7 00	4 59	7 04	5 50	5 53	5 51	5 52	5 51	5 52	5 51	5 52	5 51	5 53	24	
24	4 41	7 31	4 35	7 37	4 28	7 44	4 21	7 52	4 12	8 00	5 16	6 47	5 13	6 49	5 10	6 54	5 08	6 57	5 01	7 02	5 52	5 51	5 52	5 50	5 52	5 50	5 52	5 50	5 53	5 51	25	
25	4 42	7 30	4 36	7 36	4 29	7 43	4 22	7 51	4 13	7 58	5 18	6 45	5 14	6 48	5 11	6 52	5 09	6 55	5 03	7 00	5 53	5 49	5 54	5 48	5 54	5 48	5 54	5 48	5 54	5 48	26	
26	4 42	7 29	4 37	7 35	4 30	7 43	4 24	7 49	4 15	7 57	5 19	6 44	5 16	6 46	5 12	6 50	5 09	6 53	5 04	6 58	5 54	5 47	5 55	5 46	5 55	5 46	5 55	5 46	5 56	5 46	27	
27	4 43	7 28	4 38	7 34	4 31	7 42	4 25	7 47	4 17	7 55	5 20	6 43	5 17	6 45	5 14	6 50	5 10	6 51	5 06	6 58	5 55	5 45	5 56	5 45	5 57	5 45	5 57	5 45	5 58	5 46	28	
28	4 44	7 27	4 39	7 33	4 32	7 41	4 26	7 46	4 18	7 54	5 21	6 42	5 18	6 43	5 15	6 49	5 12	6 49	5 08	6 54	5 56	5 44	5 57	5 45	5 58	5 44	5 59	5 44	5 59	5 49	29	
29	4 44	7 26	4 40	7 32	4 33	7 40	4 28	7 44	4 20	7 52	5 22	6 38	5 19	6 41	5 17	6 44	5 14	6 47	5 10	6 51	5 57	5 43	5 58	5 44	5 59	5 44	5 59	5 44	5 59	5 49	30	
30	4 47	7 26	4 41	7 32	4 35	7 38	4 28	7 44	4 20	7 52	5 22	6 38	5 19	6 41	5 17	6 44	5 14	6 47	5 10	6 51	5 57	5 43	5 58	5 44	5 59	5 44	5 59	5 44	5 59	5 49	31	
31	4 47	7 26	4 41	7 32	4 35	7 38	4 28	7 44	4 20	7 52	5 22	6 38	5 19	6 41	5 17	6 44	5 14	6 47	5 10	6 51	5 57	5 43	5 58	5 44	5 59	5 44	5 59	5 44	5 59	5 49	31	
Day of Month.	October.										November.										December.										Day of Month.	
	Latitude 44°.		Latitude 46°.		Latitude 48°.		Latitude 50°.		Latitude 52°.		Latitude 44°.		Latitude 46°.		Latitude 48°.		Latitude 50°.		Latitude 52°.		Latitude 44°.		Latitude 46°.		Latitude 48°.		Latitude 50°.		Latitude 52°.			
	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.	Sun-rise.	Sun-set.		
1	5 58	5 41	5 58	5 41	5 59	5 40	6 00	5 39	6 01	5 39	6 37	4 51	6 41	4 46	6 45	4 42	6 50	4 37	6 55	4 33	7 15	4 23	7 22	4 19	7 29	4 09	7 37	4 01	7 46	3 54	1	
2	5 59	5 40	5 59	5 39	6 01	5 38	6 02	5 37	6 03	5 37	6 38	4 49	6 42	4 46	6 47	4 41	6 52	4 36	6 57	4 31	7 16	4 23	7 23	4 17	7 31	4 09	7 39	4 01	7 47	3 53	2	
3	5 59	5 38	6 01	5 37	6 02	5 36	6 03	5 35	6 05	5 35	6 40	4 48	6 44	4 48	6 48	4 39	6 53	4 36	6 59	4 29	7 17	4 23	7 24	4 16	7 32	4 08	7 40	4 01	7 48	3 52	3	
4	5 59	5 37	6 02	5 36	6 03	5 35	6 04	5 34	6 06	5 34	6 41	4 47	6 45	4 48	6 50	4 38	6 55	4 32	7 01	4 27	7 18	4 23	7 25	4 16	7 33	4 07	7 41	4 01	7 49	3 51	4	
5	6 02	5 34	6 05	5 33	6 05	5 32	6 06	5 31	6 08	5 30	6 42	4 45	6 47	4 41	6 51	4 36	6 57	4 31	7 02	4 26	7 19	4 22	7 26	4 15	7 34	4 08	7 42	3 59	7 51	3 51	5	
6	6 04	5 32	6 04	5 31	6 07	5 30	6 09	5 28	6 10	5 28	6 44	4 44	6 48	4 39	6 53	4 35	6 58	4 29	7 07	4 25	7 20	4 22	7 27	4 14	7 35	4 08	7 43	3 59	7 53	3 51	6	
7	6 05	5 31	6 06	5 30	6 08	5 28	6 10	5 26	6 11	5 25	6 46	4 43	6 49	4 38	6 54	4 33	7 00	4 28	7 06	4 22	7 21	4 23	7 29	4 14	7 36	4 07	7 45	3 59	7 54	3 50	7	
8	6 06	5 29	6 08	5 28	6 09	5 26	6 11	5 24	6 13	5 23	6 46																					

CHAPTER II.—HISTORY AND CHRONOLOGY.

PART I.—HISTORY.

In the 1922-23 edition of the Canada Year Book, pp. 60-80, will be found an outline of the history of Canada, not reprinted here due to pressure on available space.

A select bibliography of historical works relating to Canada was contributed by the late Adam Shortt, C.M.G., LL.D., F.R.S.C., Chairman of the Historical Documents Publication Board, Ottawa, to the 1925 edition of the Canada Year Book, where it appears on pp. 53-55.

A special article "Canada on Vimy Ridge", prepared by Colonel A. Fortescue Duguid, D.S.O., B.Sc., R.C.A., Director of the Historical Section, Department of National Defence, was published on the occasion of the unveiling of the Vimy Memorial and appears on pp. 50-60 of the Canada Year Book, 1936.

PART II.—CHRONOLOGY, 1497 to 1938.

1497. June 24, Eastern coast of North America discovered by John Cabot.
1498. Cabot discovered Hudson strait.
1501. Gaspar Corte Real visited Newfoundland and Labrador.
1524. Verrazano explored the coast of Nova Scotia.
1534. July 24, Jacques Cartier, on his first voyage, erected a cross at Gaspé, claiming the land for the King of France.
1535. Cartier's second voyage. He ascended the St. Lawrence to Stadacona (Quebec), (Sept. 14), and Hochelaga (Montreal), (Oct. 2).
1541. Cartier's third voyage. He planted wheat, cabbages, turnips, and lettuces near Cap Rouge river.
1542-3. De Roberval and his party wintered at Cape Rouge, and were rescued by Cartier on his fourth voyage.
1557. Sept. 1, Death of Cartier at St. Malo, France.
1592. Straits of Juan de Fuca discovered by de Fuca.
1603. June 22, Champlain's first landing in Canada, at Quebec.
1604. De Monts settled colony on island in the St. Croix river.
1605. Founding of Port Royal (Annapolis, N.S.).
1608. Champlain's second visit. July 3, Founding of Quebec.
1609. July, Champlain discovered lake Champlain.
1610-11. Hudson explored Hudson bay and James bay.
1611. Brûlé ascended the Ottawa river.
1612. Oct. 15, Champlain made Lieutenant-General of New France.
1613. June, Champlain ascended the Ottawa.
1615. Champlain explored lakes Nipissing, Huron, and Ontario (discovered by Brûlé and Le Caron).
1616. First schools opened at Tadoussac and on the site of the city of Three Rivers.
1617. Arrival at Quebec of the first colonist, Louis Hébert and his family.
1620. Population of Quebec, 60 persons.
1621. Code of laws issued and register of births, deaths, and marriages opened in Quebec. Nova Scotia granted to Sir William Alexander by King James I.
1622. Lake Superior discovered by Brûlé.
1623. First British settlement of Nova Scotia.
1627. New France and Acadia granted to the Company of 100 Associates.
1628. Port Royal taken by Sir David Kirke.
1629. April 24, Treaty of Susa between France and England. July 20, Quebec taken by Sir David Kirke.
1632. Mar. 29, Canada and Acadia restored to France by the Treaty of St. Germain-en-Laye.
1633. May 23, Champlain made first Governor of New France.
1634. July 4, Founding of Three Rivers.
1634-35. Exploration of the Great Lakes by Nicolet.
1635. Dec. 25, Death of Champlain at Quebec. Founding of the first college at Quebec.
1638. June 11, First recorded earthquake in Canada.
1640. Discovery of lake Erie by Chaumonot and Brébeuf.
1641. Resident population of New France, 240.
1642. May 17, Founding of Ville-Marie (Montreal), by Maisonneuve.
1646. Exploration of the Saguenay by Dablon.
1647. Lake St. John discovered by de Quen.
1648. Mar. 5, Council of New France created.
1649. Mar. 16-17, Murder of Fathers Brébeuf and Lalemant by Indians and massacre of the Hurons.
1654. August, Acadia taken by an expedition from New England.
1656. Acadia granted by Cromwell to La Tour, Temple, and Crowne.
1659. June 16, François de Laval arrived in Canada as Vicar-Apostolic.
1660. May 21, Dollard des Ormeaux and sixteen companions killed by Iroquois at the Long Sault, Ottawa river.

1663. Company of 100 Associates dissolved. Feb. 5, severe earthquake. April, Sovereign Council of New France established. Population of New France, 2,500, of whom 800 were in Quebec. Foundation of the "Grand Seminary" at Quebec, by Laval.
1664. May, Company of the West Indies founded.
1665. Mar. 23, Talon appointed Intendant.
1666. Feb.-Mar., First census; population of New France, 3,215.
1667. July 21, Acadia restored to France by the Treaty of Breda. Sept.-Oct., Second census; white population of New France, 3,918.
1668. Foundation of the "Little Seminary" at Quebec by Laval. Mission at Sault Ste. Marie founded by Marquette.
1670. May 2, Charter of the Hudson's Bay Company granted.
1671. Population of Acadia, 441.
1672. Population of New France, 6,705. April 6, Comte de Frontenac, Governor.
1673. June 13, Cataragui (Kingston) founded.
1674. Oct. 1, Laval became first Bishop of Quebec.
1675. Population of New France, 7,832.
1678. Niagara falls visited by Hennepin.
1679. Ship *Le Griffon* built on Niagara river above the falls by La Salle. Third census; population of New France, 9,400; of Acadia, 515.
1681. Fourth census; population of New France, 9,677.
1682. Frontenac recalled.
1683. Population of New France, 10,251.
1685. First issue of card money. Fifth census; population of New France, 12,263, including 1,538 settled Indians.
1686. Population of New France, 12,373; of Acadia, 885.
1687. Mar. 18, La Salle assassinated.
1688. Sixth census; population of New France, 11,562, including 1,259 settled Indians.
1689. June 7, Frontenac re-appointed Governor. Aug. 5, Massacre of whites by Indians at Lachine.
1690. May 21, Sir William Phips captured Port Royal, but was repulsed in an attack on Quebec (Oct. 16-21).
1692. Seventh census; population of New France, 12,431. Oct. 22, Defence of Verchères against Indians by Madeleine de Verchères.
1693. Population of Acadia, 1,009.
1695. Eighth census; population of New France, 13,639, including 853 settled Indians.
1697. Sept. 20, By the treaty of Ryswick, places taken during the war were mutually restored. D'Iberville defeated the Hudson's Bay Co.'s ships on Hudson bay.
1699. Nov. 28, Death of Frontenac. Ninth census; population of New France, 15,355.
1701. La Motte Cadillac built a fort at Detroit.
1703. June 16, Sovereign Council of Canada became Superior Council and membership increased from 7 to 12.
1706. Tenth census; population of New France, 16,417.
1708. Death of Laval.
1709. British invasion of Canada.
1710. Oct. 13, Port Royal taken by Nicholson.
1711. Sept. 1, Part of Sir H. Walker's fleet, proceeding against Quebec, wrecked off the Seven Islands.
1713. April 11, Treaty of Utrecht; Hudson Bay, Acadia, and Newfoundland ceded to Great Britain. August, Louisbourg founded by the French. Population of New France, 18,119.
1718. Foundation of New Orleans in carrying out French plan to control the Mississippi as well as the St. Lawrence.
1719. Census population of New France, 22,530.
1720. Population of New France, 24,234; of Ile St. Jean (P.E.I.), about 100. April 25, Governor and Council of Nova Scotia appointed.
1721. June 19, Burning of about one-half of Montreal. Census population of New France, 24,951.
1727. Population of New France, 30,613.
1728. Population of Ile St. Jean (P.E.I.), 330.
1731. Population of the north of the peninsula of Acadia, 6,000.
1733. Discovery of lake Winnipeg by La Vérendrye.
1734. Road opened from Quebec to Montreal. Census population of New France, 37,716.
1737. Iron smelted on St. Maurice. French population of the north of the Acadia peninsula, 7,598.
1739. Census population of New France, 42,701.
1743. The younger La Vérendrye discovered the Rocky mountains.
1745. June 17, Taking of Louisbourg by Pepperell and Warren.
1748. Oct. 18, Treaty of Aix-la-Chapelle. Louisbourg restored to France in exchange for Madras.
1749. June 21, Founding of Halifax—British immigrants brought to Nova Scotia by Governor Cornwallis, 2,544 persons. Fort Rouillé (Toronto) built.
1750. St. Paul's Church, Halifax (oldest Anglican church in Canada), built.
1752. Mar. 25, Issue of the Halifax *Gazette*, first newspaper in Canada. British and German population of Nova Scotia, 4,203.
1754. Census population of New France, 55,009.
1755. Establishment at Halifax of first post office in what is now Canada, together with direct mail communication with Great Britain. June 16, Surrender of Fort Beauséjour on the isthmus of Chignecto to the British. Sept. 10, Expulsion of the Acadians from Nova Scotia.

1756. Seven Years' War between Great Britain and France began.
1758. July 26, Final capture of Louisbourg by the British. Oct. 7, First meeting of the Legislature of Nova Scotia.
1759. July 25, Taking of Fort Niagara by the British. July 26, Beginning of the siege of Quebec. July 31, French victory at Beauport Flats. Sept. 13, Defeat of the French on the Plains of Abraham. Death of Wolfe. Sept. 14, Death of Montcalm. Sept. 18, Surrender of Quebec.
1760. April 28, Victory of the French under Lévis at Ste. Foy. Sept. 8, Surrender of Montreal. Military rule set up in Canada.
1762. British population of Nova Scotia, 8,104. First British settlement in New Brunswick.
1763. Feb. 10, Treaty of Paris, by which Canada and its dependencies were ceded to the British. May, Rising of Indians under Pontiac, who took a number of forts and defeated the British at Bloody Run (July 31). Oct. 7, Civil government proclaimed. Cape Breton and Ile St. Jean annexed to Nova Scotia; Labrador, Anticosti, and Magdalen islands to Newfoundland. Nov. 21, General James Murray appointed Governor-in-Chief. Canadian post offices established at Montreal, Three Rivers, and Quebec.
1764. June 21, First issue of the *Quebec Gazette*. Aug. 13, Civil government established.
1765. Publication of the first book printed in Canada, "Catéchisme du Diocèse de Sens". May 18, Montreal nearly destroyed by fire. Population of Canada, 69,810.
1766. July 24, Peace made with Pontiac at Oswego.
1768. Charlottetown, Ile St. Jean (P.E.I.), founded. April 11, Great fire at Montreal. April 12, Sir Guy Carleton (Lord Dorchester) Governor-in-Chief.
1769. Ile St. Jean (P.E.I.) separated from Nova Scotia.
- 1770-72. Hearne's journey to the Coppermine and Slave rivers and Great Slave lake.
1773. Suppression of the order of Jesuits in Canada and escheat of their estates.
1774. June 22, The Quebec Act passed.
1775. May 1, The Quebec Act came into force. Outbreak of the American Revolution. Montgomery and Arnold invaded Canada. Nov. 12, Montgomery took Montreal; Dec. 31, was defeated and killed in an attack on Quebec.
1776. The Americans were defeated and driven from Canada by Carleton.
1777. Sept. 18, General Frederick Haldimand Governor-in-Chief.
1778. Captain Jas. Cook explored Nootka sound and claimed the northwest coast of America for Great Britain.
- June 3, First issue of the *Montreal Gazette*.
1783. Sept. 3, Treaty of Versailles, recognizing the independence of the United States. Organization of the Northwest Company at Montreal. Kingston, Ont., and Saint John, N.B., founded by the United Empire Loyalists.
1784. Population of Canada, 113,012. Aug. 16, New Brunswick and (Aug. 26) Cape Breton separated from Nova Scotia.
1785. May 18, Incorporation of Partridgeville (Saint John, N.B.).
1786. April 22, Lord Dorchester again Governor-in-Chief. Oct. 23, Government of New Brunswick moved from Saint John to Fredericton.
1787. C. Inglis appointed Anglican Bishop of Nova Scotia—the first colonial bishopric in the British Empire.
1788. King's College, Windsor, N.S., opened. Sailing packet service restored between Great Britain and Halifax.
1789. Quebec and Halifax Agricultural Societies established.
1790. Spain surrendered her exclusive rights on the Pacific coast. Population of Canada, 161,311. (This census did not include what became, in the next year, Upper Canada.)
1791. The Constitutional Act divided the province of Quebec into Upper and Lower Canada, each with a lieutenant-governor and legislature. The Act went into force Dec. 26. Sept. 12, Colonel J. G. Simcoe, first Lieutenant-Governor of Upper Canada.
1792. Sept. 17, First Legislature of Upper Canada opened at Newark (Niagara). Dec. 17, First Legislature of Lower Canada opened at Quebec. Vancouver island circumnavigated by Vancouver.
1793. April 18, First issue of the *Upper Canada Gazette*. June 28, Jacob Mountain appointed first Anglican Bishop of Quebec. July 9, Importation of slaves into Upper Canada forbidden. Rocky mountains crossed by (Sir) Alexander Mackenzie, who reached the Pacific ocean. York (Toronto) founded by Simcoe.
1794. Nov. 19, Jay's Treaty between Great Britain and the United States.
1795. Pacific coast of Canada finally given up by Spaniards.
1796. Government of Upper Canada moved from Niagara to York (Toronto).
1798. St. John's island (Ile St. Jean, population 4,500) renamed Prince Edward Island.
1800. Founding of New Brunswick College, Fredericton (now University of N.B.). The Rocky mountains crossed by David Thompson.
1803. Settlers sent by Lord Selkirk to Prince Edward Island.
1806. Nov. 22, Issue of *Le Canadien*—first wholly French newspaper. Popula-

- tion—Upper Canada, 70,718; Lower Canada, 250,000; New Brunswick, 35,000; P.E.I., 9,676.
1807. Simon Fraser explored the Fraser river. Estimated population of Nova Scotia, 65,000.
1809. Nov. 4, First Canadian steamer ran from Montreal to Quebec.
1811. Lord Selkirk's Red River settlement founded on land granted by Hudson's Bay Company.
1812. June 18, Declaration of war by the United States. July 12, Americans under Hull crossed the Detroit river. Aug. 16, Detroit surrendered by Hull to Brock. Oct. 13, Defeat of the Americans at Queenston Heights and death of General Brock.
1813. Jan. 22, British victory at Frenchtown. April 27, York (Toronto) taken and burned by the Americans. June 5, British victory at Stoney Creek. June 24, British, warned by Laura Secord, captured an American force at Beaver Dams. Sept. 10, Commodore Perry destroyed the British flotilla on lake Erie. Oct. 5, Americans under Harrison defeated the British at Moraviantown. Tecumseh killed. Oct. 26, Victory of French-Canadian troops under de Salaberry at Châteauguay. Nov. 11, Defeat of the Americans at Crysler's Farm. British stormed Fort Niagara and burned Buffalo.
1814. Mar. 30, Americans repulsed at La Colle. May 6, Capture of Oswego by the British. July 5, American victory at Chippawa. July 25, British victory at Lundy's Lane. July, British from Nova Scotia invaded and occupied northern Maine. Sept. 11, British defeat at Plattsburg on lake Champlain. Dec. 24, Treaty of Ghent ended the war. Population—Upper Canada, 95,000; Lower Canada, 335,000.
1815. July 3, Treaty of London regulated trade with the United States. The Red River settlement destroyed by the Northwest Company but restored by Governor Semple.
1816. June 19, Governor Semple killed. The Red River settlement again destroyed.
1817. July 18, First Treaty with the Northwest Indians. Lord Selkirk restored the Red River settlement. Opening of the Bank of Montreal; first note issue Oct. 1. Population of Nova Scotia, 81,351. Rush-Bagot Convention with the United States, limiting naval armament on the Great Lakes, signed.
1818. Oct. 20, Convention at London regulating North American fisheries. Dalhousie College, Halifax, founded. Bank of Quebec founded.
- 1819-22. Franklin's overland Arctic expedition.
1820. Oct. 16, Cape Breton re-annexed to Nova Scotia.
1821. Mar. 26, The Northwest Company absorbed by the Hudson's Bay Company. Charter given to McGill College.
1822. Population of Lower Canada, 427,465.
1824. Population of Upper Canada, 150,066; of New Brunswick, 74,176.
1825. Oct. 6, Great fire in the Miramichi district, N.B. Opening of the Lachine canal. Population of Lower Canada, 479,288.
1826. Founding of Bytown (Ottawa).
1827. Sept. 29, Convention of London relating to the territory west of the Rocky mountains. Population of Nova Scotia (including Cape Breton), 123,630.
1828. The Methodist Church of Upper Canada separated from that of the United States.
1829. Nov. 27, First Welland canal opened. McGill University opened. Upper Canada College founded.
1831. June 1, The North Magnetic Pole discovered by (Sir) James Ross. Population—Upper Canada, 236,702; Lower Canada, 553,131; Assiniboia, 2,390.
1832. Outbreak of cholera in Canada. Incorporation of Quebec and Montreal. Bank of Nova Scotia founded. May 30, Opening of the Rideau canal.
1833. Aug. 18, The steamer *Royal William*, built at Quebec, crossed the Atlantic from Pictou to England.
1834. Feb. 21, The Ninety-Two Resolutions on public grievances passed by the Assembly of Lower Canada. Mar. 6, Incorporation of Toronto. Population of Upper Canada, 321,145; of New Brunswick, 119,457; of Assiniboia, 3,356.
1836. July 21, Opening of the first railway in Canada from Laprairie to St. John's, Que. Victoria University opened at Cobourg (afterwards moved to Toronto).
1837. Report of the Canada Commissioners. Rebellion in Lower Canada (Papineau) and Upper Canada (W. L. Mackenzie). Nov. 23, Gas lighting first used in Montreal.
1838. Feb. 10, Constitution of Lower Canada suspended and Special Council created. Mar. 30, The Earl of Durham, Governor-in-Chief. April 27, Martial law revoked. June 28, Amnesty to political prisoners proclaimed. Nov. 1, Lord Durham, censured by British Parliament, resigned. Population—Upper Canada, 339,442; Assiniboia, 3,966; Nova Scotia, 202,575.
1839. Feb. 11, Lord Durham's report submitted to Parliament. John Strachan ordained first Anglican Bishop of Toronto. Oct. 19, Charles Poulett Thomson (Lord Sydenham) arrived in Canada as Governor-in-Chief.
1840. July 23, Passing of the Act of Union. First ship of the Cunard line arrived at Halifax.
1841. Feb. 10, Union of the two provinces as the Province of Canada, with

- Kingston as capital. Feb. 13, Draper-Ogden Administration. April 10, Halifax incorporated. June 13, Meeting of the first United Parliament. Sept. 19, Death of Lord Sydenham. Population of Upper Canada, 455,668; of P.E.I., 47,042.
1842. Mar. 10, Opening of Queen's University, Kingston. Aug. 9, The Ashburton Treaty. Sept. 16, Baldwin-Lafontaine Administration.
1843. June 4, Victoria, B.C., founded. Dec. 12, Draper-Viger Administration. King's (now University) College, Toronto, opened.
1844. May 10, Capital moved from Kingston to Montreal. Knex College, Toronto, founded. Population of Lower Canada, 697,084.
1845. May 28 and June 28, Great fires at Quebec. Franklin started on his last Arctic expedition.
1846. May 18, Kingston incorporated. June 15, Oregon Boundary Treaty. June 18, Draper-Papineau Administration. First telegraph, operated by Toronto, Hamilton and Niagara Electro-Magnetic Telegraph Co., opened.
1847. May 29, Sherwood-Papineau Administration. Nov. 25, Montreal-Lachine Railway opened.
1848. Mar. 11, Lafontaine-Baldwin Administration. May 30, Fredericton incorporated. St. Lawrence canals opened to navigation.
1849. April 25, Signing of the Rebellion Losses Act; rioting in Montreal and burning of the Parliament Buildings. Nov. 14, Toronto made the capital. Vancouver island granted to the Hudson's Bay Company. Population of Assiniboia, 5,391.
1851. April 6, Transfer of the postal system from the British to the Provincial Government; uniform rate of postage introduced. April 23, Postage stamps issued. Aug. 2, Incorporation of Trinity College, Toronto. Sept. 22, Quebec became the capital. Oct. 28, Hincks-Morin Administration. Responsible government granted to Prince Edward Island. Population—Upper Canada, 952,004; Lower Canada, 890,261; New Brunswick, 193,800; Nova Scotia, 276,854.
1852. July 8, Great fire at Montreal. Dec. 8, Laval University, Quebec, opened. Grand Trunk Railway chartered.
1853. Opening of Grand Trunk Railway from Montreal to Portland.
1854. June 5, Reciprocity Treaty with the United States. Sept. 11, MacNab-Morin Ministry. Seigneurial tenure in Lower Canada abolished. Secularization of the clergy reserves.
1855. Jan. 1, Incorporation of Ottawa. Jan. 27, MacNab-Taché Administration. Mar. 9, Opening of the Niagara Railway suspension bridge. April 17, Incorporation of Charlottetown. Oct. 20, Government moved to Toronto.
1856. The Legislative Council of Canada made elective. First meeting of the Legislature of Vancouver island. May 24, Taché-J. A. Macdonald Administration. Oct. 27, Opening of the Grand Trunk Railway from Montreal to Toronto. Population of Assiniboia, 6,691.
1857. Nov. 26, J. A. Macdonald-Cartier Administration. Dec. 31, Ottawa chosen by Queen Victoria as future capital of Canada.
1858. February, Discovery of gold in Fraser River valley. July 1, Introduction of Canadian decimal currency. Aug. 2, Brown-Dorion Administration. Aug. 5, Completion of the Atlantic cable; first message sent. Aug. 6, Cartier-J. A. Macdonald Administration. Aug. 20, Colony of British Columbia established. Control of Vancouver island surrendered by the Hudson's Bay Company.
1859. January, Canadian silver coinage issued. Sept. 24, Government moved to Quebec.
1860. Aug. 8, The Prince of Wales (King Edward VII) arrived at Quebec. Sept. 1, Laying of the corner-stone of the Parliament Buildings at Ottawa by the Prince of Wales. Prince of Wales College, Charlottetown, founded.
1861. Aug. 14, Great flood at Montreal. Sept. 10, Meeting of the first Anglican provincial synod. Population—Upper Canada, 1,396,091; Lower Canada, 1,111,566; New Brunswick, 252,047; Nova Scotia, 330,857; Prince Edward Island, 80,857.
1862. May 24, Sandfield Macdonald-Sicotte Administration. Aug. 2, Victoria, B.C., incorporated.
1863. May 16, Sandfield Macdonald-Dorion Administration.
1864. Mar. 30, Taché-J. A. Macdonald Administration. Conferences on confederation of British North America; Sept. 1, at Charlottetown; Oct. 10-29, at Quebec. Oct. 19, Raid of American Confederates from Canada on St. Albans, Vermont.
1865. Feb. 3, The Canadian Legislature resolved on an address to the Queen praying for union of the provinces of British North America. Aug. 7, Belleau-J. A. Macdonald Administration. Oct. 20, Proclamation fixing the seat of government at Ottawa.
1866. Mar. 17, Termination of the Reciprocity Treaty by the United States. May 31, Raid of Fenians from the United States into Canada; they were defeated at Ridgeway (June 2) and retreated across the border (June 3). June 8, First meeting at Ottawa of the Canadian Legislature. Nov. 17, Proclamation of the union of Vancouver Island with British Columbia.

NOTE.—*The Ministries, and the dates of elections and lengths of sessions of all Dominion Parliaments following Confederation are given in Tables 2 and 4, respectively, of Chapter III. Changes in Provincial Governments are indicated in Table 11 of that chapter. References regarding these matters have therefore been dropped from the chronology below.*

1867. Mar. 29, Royal Assent given to the British North America Act. July 1, The Act came into force; Union of the provinces of Canada, Nova Scotia and New Brunswick as the Dominion of Canada; Upper and Lower Canada made separate provinces as Ontario and Quebec; Viscount Monck first Governor General; Sir John A. Macdonald, Premier. Nov. 6, Meeting of the first Dominion Parliament.
1868. April 7, Murder of D'Arcy McGee at Ottawa. July 31, The Rupert's Land Act authorized the acquisition by the Dominion of the Northwest Territories.
1869. June 22, Act providing for the government of the Northwest Territories. Nov. 19, Deed of surrender to the Crown of the Hudson's Bay Company's territorial rights in the Northwest. Outbreak of the Red River Rebellion under Riel.
1870. May 12, Act to establish the province of Manitoba. July 15, Northwest Territories transferred to the Dominion and Manitoba admitted into Confederation. Aug. 24, Wolseley's expedition reached Fort Garry (Winnipeg); end of the rebellion.
1871. April 2, First Dominion Census (populations at this and succeeding enumerations given on p. 126). April 14, Act establishing uniform currency in the Dominion. May 8, Treaty of Washington, dealing with questions outstanding between the United Kingdom and the United States. July 20, British Columbia entered Confederation.
1873. May 23, Act establishing the North West Mounted Police. July 1, Prince Edward Island entered Confederation. Nov. 8, Incorporation of Winnipeg.
1874. May, Ontario Agricultural College, Guelph, opened.
1875. April 8, The Northwest Territories Act established a Lieutenant-Governor and a Northwest Territories Council. April-May, Letting of first contract and commencement of work upon the Canadian Pacific railway as a Government line; work commenced at Fort William. June 15, Formation of the Presbyterian Church in Canada.
1876. June 1, Opening of the Royal Military College, Kingston. June 5, First sitting of the Supreme Court of Canada. July 3, Opening of the Intercolonial Railway from Quebec to Halifax. Branch of Laval University established at Montreal.
1877. June 20, Great fire at Saint John, N.B. October, First exportation of wheat from Manitoba to the United Kingdom. Founding of the University of Manitoba.
1878. July 1, Canada joined the International Postal Union.
1879. May 15, Adoption of a protective tariff ("The National Policy").
1880. Royal Canadian Academy of Arts founded; first meeting and exhibition, Mar. 6. May 11, Sir A. T. Galt appointed first Canadian High Commissioner in London. Sept. 1, All British possessions in North America and adjacent islands except Newfoundland and its dependencies annexed to Canada by Imperial Order in Council of July 31. Oct. 21, Signing of the contract with the present Canadian Pacific Railway Co. for the completion of the Canadian Pacific railway.
1881. April 4, Second Dominion Census. May 2, First sod of the Canadian Pacific railway as a company line turned.
1882. May 8, Provisional districts of Assiniboia, Saskatchewan, Athabaska, and Alberta formed. May 25, First meeting of the Royal Society of Canada. Aug. 23, Regina established as seat of government of Northwest Territories.
1883. Sept. 5, Formation of the Methodist Church in Canada; united conference.
1884. May 24, Sir Charles Tupper, High Commissioner in London. Aug. 11, Order in Council settling the boundary of Ontario and Manitoba.
1885. Mar. 26, Outbreak of Riel's second rebellion in the Northwest. April 24, Engagement at Fish Creek. May 2, Engagement at Cut Knife. May 12, Taking of Batoche. May 16, Surrender of Riel. Aug. 24, First census of the Northwest Territories. Nov. 7, Last spike of Canadian Pacific Railway main line driven at Craigellachie. Nov. 16, Execution of Riel.
1886. April 6, Incorporation of Vancouver. June 7, Archbishop Taschereau of Quebec made first Canadian Cardinal. June 13, Vancouver destroyed by fire. June 28, First through train of the Canadian Pacific Railway left Montreal for Port Moody. July 31, First quinquennial census of Manitoba.
1887. Interprovincial Conference at Quebec. April 4, First Colonial Conference in London.
1888. Feb. 15, Signing of Fishery Treaty between United Kingdom and United States at Washington. August, Rejection of Fishery Treaty by United States' Senate.

1890. Mar. 31, The Manitoba School Act abolished separate schools.
1891. April 5, Third Dominion Census. June 6, Death of Sir John A. Macdonald.
1892. Feb. 29, Washington Treaty, providing for arbitration of the Bering Sea Seal Fisheries question. July 22, Boundary Convention between Canada and United States.
1893. April 4, First sitting of the Bering Sea Arbitration Court. Dec. 18, Archbishop Machray, of Rupert's Land, elected first Anglican Primate of all Canada.
1894. June 28, Second Colonial Conference at Ottawa. Dec. 12, Death of Sir John Thompson at Windsor Castle.
1895. Sept. 10, Opening of new Sault Ste. Marie canal.
1896. April 24, Sir Donald Smith (Lord Strathcona) High Commissioner in London. August, Gold discovered in the Klondyke.
1897. June 22, Celebration throughout the Empire of the Diamond Jubilee of H.M. Queen Victoria. July, Third Colonial Conference in London. Dec. 17, Award of the Bering Sea Arbitration Court.
1898. June 13, The Yukon district established as a separate Territory. Aug. 1, The British Preferential Tariff went into force. Aug. 23, Meeting at Quebec of the Joint High Commission between Canada and the United States. Dec. 25, British Imperial penny (2 cent) postage introduced.
1899. Oct. 1, Mgr. Diomède Falconio arrived at Quebec as first permanent Apostolic Delegate to Canada. Oct. 11, Beginning of the South African War. Oct. 29, First Canadian contingent left Quebec for South Africa.
1900. Feb. 27, Battle of Paardeberg. April 26, Great fire at Ottawa and Hull.
1901. Jan. 22, Death of Queen Victoria and accession of King Edward VII. April 1, Fourth Dominion Census. Sept. 16-Oct. 21, Visit to Canada of the Duke and Duchess of Cornwall and York (King George V and Queen Mary).
1902. May 31, End of South African War; peace signed at Vereeniging. June 30, Meeting of fourth Colonial Conference in London. Aug. 9, Coronation of H. M. King Edward VII. Dec., First message sent by wireless from Canada to the United Kingdom via Cape Breton, N.S.
1903. Jan. 24, Signing of the Alaskan Boundary Convention. June 19, Incorporation of Regina. Oct. 20, Award of the Alaskan Boundary Commission.
1904. Feb. 1, Dominion Railway Commission established. April 19, Great fire in Toronto. Oct. 8, Incorporation of Edmonton.
1905. Sept. 1, Creation of the provinces of Alberta and Saskatchewan.
1906. University of Alberta founded. Oct. 8, Interprovincial Conference at Ottawa.
1907. April 15-May 14, Fifth Colonial Conference in London. New customs tariff, including introduction of intermediate tariff. Oct. 17, Transatlantic wireless open for limited public service. University of Saskatchewan founded. Dec. 6, First recorded flight in Canada of a heavier-than-air machine carrying a passenger (Dr. Graham Bell's tetrahedral kite, *Cygnét*).
1908. Jan. 2, Establishment of Ottawa Branch of Royal Mint. June 21-23, Bicentenary of Bishop Laval celebrated at Quebec. July 20-31, Quebec tercentenary celebrations. Visit of Prince of Wales to Quebec. Aug. 2, Great fire in Kootenay valley, B.C. University of British Columbia founded.
1909. Jan. 11, Signing of International Boundary Waters Convention between Canada and United States. Feb. 23, First flight in Canada of a heavier-than-air machine under its own power (McCurdy's *Silver Dart*).
1910. May 6, Death of King Edward VII and accession of King George V. Sept. 7, North Atlantic Coast Fisheries Arbitration Award of The Hague Tribunal. New trade agreements made with Germany, Belgium, Holland, and Italy. Oct. 11, Inauguration at Kitchener of Ontario hydro-electric power transmission system.
1911. May 23-June 20, Imperial Conference in London. June 1, Fifth Dominion Census. June 22, Coronation of H.M. King George V. July 11, Disastrous fires in Porcupine district.
1912. Mar. 29-April 9, First Canada-West Indies Trade Conference held at Ottawa. April 15, Loss of the steamship *Titanic*. Appointment of Dominions Royal Commission. May 15, Extension of the boundaries of Quebec, Ontario, and Manitoba.
1914. May 20, Loss of the steamship *Empress of Ireland*. Aug. 4, War with Germany; Aug. 12, with Austria-Hungary; Nov. 5, with Turkey. Aug. 18-22, Special war session of Canadian Parliament. Oct. 16, First Canadian contingent of over 33,000 troops landed at Plymouth, England.
1915. February, First Canadian contingent landed in France and proceeded to Flanders. April 22, Second Battle of Ypres. April 24, Battle of St. Julien. May 20-26, Battle of Festubert. June 15, Battle of Givenchy.
1916. Jan. 12, Order in Council authorizing increase in number of Canadian troops to 500,000. Feb. 3, Destruction of the Houses of Parliament at Ottawa by fire. April 3-20, Battle of St. Eloi. June 1, Census of Prairie Provinces. June 1-3, Battle of Sanctuary Wood. July 1, Commencement of the Battle of the Somme.

- Sept. 1, Corner-stone of new Houses of Parliament laid by Duke of Connaught.
1917. Feb. 12-May 15, Imperial Conference. Mar. 20-May 2, Meetings in London of Imperial War Cabinet. -Mar. 21-April 27, Imperial War Conference. April 6, United States declared war against Germany. April 9, Capture of Vimy Ridge. June 21, Appointment of Food Controller. Aug. 15, Battle of Loos, capture of Hill 70. Aug. 29, Passing of Military Service Act. Sept. 20, Completion of Quebec Bridge. Parliamentary franchise extended to women. Oct. 26-Nov. 10, Battle of Passchendaele. Dec. 6, Serious explosion at Halifax, N.S.
1918. Mar. 31, Germans launched critical offensive on West Front. March-April, Second Battle of the Somme. April 17, Secret session of Parliament. June-July, Prime Minister and colleagues attended Imperial War Conference in London. July 18, Allies assumed successful offensive on West Front. Aug. 12, Battle of Amiens. Aug. 26-28, Capture of Monchy le Preux. Sept. 2-4, Breaking of Drocourt-Quéant line. Sept. 16, Austrian peace note. Sept. 27-29, Capture of Bourlon Wood. Sept. 30, Bulgaria surrendered and signed armistice. Oct. 1-9, Capture of Cambrai. Oct. 6, First German peace note. Oct. 20, Capture of Denain. Oct. 25-Nov. 2, Capture of Valenciennes. Oct. 31, Turkey surrendered and signed armistice. Nov. 4, Austria-Hungary surrendered and signed armistice. Nov. 11, Capture of Mons. Germany surrendered and signed armistice.
1919. Feb. 17, Death of Sir Wilfrid Laurier. May 1-June 15, General strike at Winnipeg and other western cities. June 28, Signing at Versailles of Peace Treaty and Protocol. Aug. 15, Arrival of the Prince of Wales for official tour in Canada. Aug. 22, Formal opening of Quebec Bridge by the Prince of Wales. Sept. 1, The Prince of Wales laid foundation stone of Peace Tower, Parliament Buildings, Ottawa. Sept. 1-Nov. 10, Special peace session, thirteenth Parliament of Canada. Dec. 20, Organization of "Canadian National Railways" by Order in Council.
1920. Jan. 10, Ratifications of the Treaty of Versailles. Feb. 19, Shareholders ratified agreement for sale of the Grand Trunk Railway to the Dominion Government. May 31-June 18, Trade Conference at Ottawa between Dominion and West Indian Governments. July 10, Sir Robert Borden succeeded by Rt. Hon. Arthur Meighen as Prime Minister. July 16, Ratifications of the Treaty of St. Germain-en-Laye.
- Aug. 9, Ratifications of the Treaty of Neuilly-sur-Seine. Nov. 15, First meeting of League of Nations Assembly began at Geneva, Switzerland.
1921. May 10, Preferential tariff arrangement with British West Indies became effective. June 1, Sixth Dominion Census. June 20-Aug. 5, Imperial Conference. Nov. 11, Opening of Conference on limitation of armament at Washington.
1922. Feb. 1, Arms Conference at Washington approved 5-power treaty, limiting capital fighting ships and disapproving unrestricted submarine warfare and use of poison gas. April 10, General Economic Conference opened at Genoa. July 13, Conference between Canada and the United States *re* perpetuating the Rush-Bagot Treaty regarding armament on the Great Lakes. Aug. 7, Allies' Conference on war debts and reparations opened at London. Oct. 10, Mudania Armistice signed by Britain, France, and Turkey. Dec. 9, Reparations Conference opened at London.
1923. April 1, Removal of British embargo on Canadian cattle effective. Oct. 1, Imperial Conference and Economic Conference at London.
1924. April 23, British Empire Exhibition opened by King George at Wembley, England, with the Prince of Wales as President. Aug. 6-16, Meeting of the British Association for the Advancement of Science at Toronto. Aug. 11-16, Meeting of International Mathematical Congress at Toronto.
1925. June 10, Inauguration of the United Church of Canada. Nov. 20, Death of Queen Alexandra.
1926. June 1, Census of Prairie Provinces. July 1, Two-cent domestic rate of postage restored. Oct. 19-Nov. 23, Imperial Conference in London. Nov. 26, Hon. C. Vincent Massey appointed Envoy Extraordinary and Minister Plenipotentiary to the United States.
1927. June 1, Hon. Wm. Phillips, first U.S. Minister to Canada, reached Ottawa. July 1-3, Diamond Jubilee of Confederation celebrated throughout the Dominion. July 30, The Prince of Wales, Prince-George, the Rt. Hon. Stanley Baldwin and party, arrived at Quebec on a visit to Canada. September, Canada elected as a non-permanent member of the Council of the League of Nations at Geneva. November, Dominion-Provincial Conference on the relations between the Dominion and the provinces.
1928. April 25, Sir Wm. H. Clark appointed first British High Commissioner to Canada. May 31, Legislative Council of Nova Scotia ceased to

- exist, leaving Quebec the only province with a bi-cameral legislature.
1929. Oct. 15-25, The Rt. Hon. J. Ramsay MacDonald, Prime Minister of Great Britain, visited Canada. Dec. 14, Transfer of natural resources to Manitoba and Alberta.
1930. Jan. 21, Five-power naval arms conference opened at London; Canada represented by Hon. J. L. Ralston. Feb. 20, Transfer of natural resources to British Columbia. Mar. 20, Transfer of natural resources to Saskatchewan. Aug. 1, H.M. Airship R-100 arrived at Montreal, being the first transatlantic lighter-than-air craft to reach Canada. Oct. 1, Imperial Conference in London.
1931. June 1, Seventh Dominion Census. June 30, The Statute of Westminster exempting the Dominion and the provinces from the operation of the Colonial Laws Validity Act and the Merchant Shipping Act approved by the House of Commons. Sept. 21, Great Britain suspended specie payments, following which Canada restricted the export of gold. Nov. 21, Abnormal Importations Act, extending preference to Empire products, assented to in the United Kingdom. Dec. 12, Statute of Westminster establishing complete legislative equality of the Parliament of Canada with that of the United Kingdom became effective.
1932. July 21-Aug. 20, Imperial Economic Conference at Ottawa. Aug. 6, Official opening of the Welland Ship Canal.
1933. Jan. 17-19, Dominion-Provincial Conference. May 18, Celebration of the 150th anniversary of the landing of the Loyalists at Saint John.
1934. August, Celebration at Gaspé of the 400th anniversary of the first landing of Jacques Cartier.
1935. Mar. 11, Bank of Canada commenced business. May 6, Celebrations throughout the Empire of the 25th anniversary of the accession of King George V to the Throne. Sept. 15, Conference of British Commonwealth Statisticians met in Ottawa. Dec. 9, Dominion-Provincial Conference met in Ottawa; Naval Limitation Conference met in London.
1936. Jan. 20, Death of H.M. King George V and accession of H. M. King Edward VIII. Mar. 8, German forces reoccupied the Rhineland in defiance of the Treaty of Versailles. June 1, Quinquennial Census of the Prairie Provinces taken. July 1-Sept. 7, Celebration in Vancouver of the Golden Jubilee of that city and of the C.P.R. July 26, Unveiling of Vimy Memorial in France by H.M. King Edward VIII. Dec. 11, Abdication of H. M. King Edward VIII and accession of H. M. King George VI.
1937. Jan. 1, Belgium represented in Canada by a Minister Plenipotentiary. Jan. 28, Decision of the Judicial Committee of the Privy Council declaring certain legislation, passed by the former Administration, on unemployment insurance, hours of labour, minimum wages, and marketing, *ultra vires* of the Dominion Parliament. Mar. 30, The Governor General and Lady Tweedsmuir visited the White House at Washington to return the official visit made by President Roosevelt at Quebec on July 30, 1936. May 12, Coronation of H. M. King George VI. July 8, Imperial Airways flying boat *Caledonia* arrived at Montreal from Southampton, inaugurating the experimental phase of the Transatlantic Airways. Aug. 14, Announcement of the appointment of a Royal Commission on Dominion-Provincial Relations, with Chief Justice Rowell as chairman. Aug. 17, Dominion Government disallows three Alberta statutes on the ground of invasion of the legislative field assigned to the Dominion Parliament. Oct. 28, The question of whether the power of disallowance vested in the Governor General by the B.N.A. Act is still subsisting, referred to the Supreme Court. Nov. 2, The question of the competency of the Provincial Government of Alberta to enact certain legislation referred to the Supreme Court in the form of three bills. Nov. 9, Reference to the Supreme Court of a question as to whether the power of a Lieutenant-Governor to reserve approval of provincial legislation still subsists. Nov. 29, Rowell Commission on Constitutional Relations opens sittings at Winnipeg.
1938. Mar. 4, Unanimous judgments of the Supreme Court of Canada on the Alberta constitutional references made in favour of the Dominion Government regarding each of the questions submitted: powers of the Governor General in Council to disallow provincial legislation, and powers of the Lieutenant-Governor to reserve provincial legislation for the signification of the pleasure of the Governor General, were found to be valid and unrestricted; the press, credit regulation, and banking taxation measures were found unconstitutional. The Court also held the Social Credit Act unconstitutional, although this was not a subject of specific reference. Mar. 11, Alberta Government appealed to the Privy Council against the judgments of the Supreme Court.

PART III.—HISTORIC SITES AND MONUMENTS IN CANADA.*

The work of restoring and preserving sites of national historic interest in Canada was inaugurated about eighteen years ago, after representations had been made to the Government concerning the need for acquiring, as a great national heritage, sites and relics associated with the early history of the Dominion. The National Parks Bureau of the Lands, Parks, and Forests Branch, Department of Mines and Resources, is now entrusted with the task of marking and preserving such sites and monuments as have been acquired. In the important work of weighing and considering the historic background and associations of sites and memorials, the Bureau is assisted by the Historic Sites and Monuments Board of Canada, an honorary body whose members, resident in various parts of the country, are historians of recognized standing.

Since the inception of its work, the Board has weighed and considered the circumstances surrounding more than a thousand sites of which over three hundred, most of which are listed below, have been judged to be of sufficient national importance to warrant their being suitably marked and maintained. These include: Indian earthworks, forts, and villages; French forts, trading posts, and mission enterprises; sites connected with British exploration and naval and military operations in the long struggle for the possession of Canada; posts of the Hudson's Bay Company; and sites related to the economic and industrial development of the Dominion.

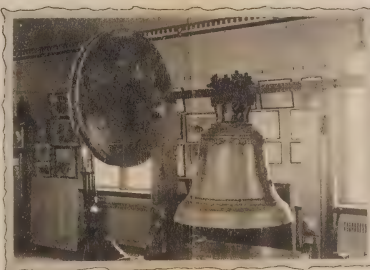
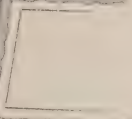
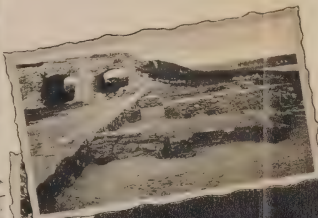
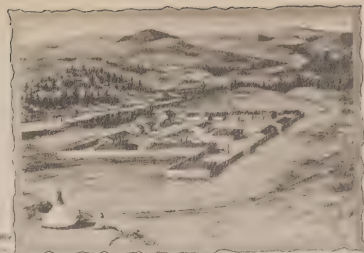
For the marking of these sites a finely designed tablet of bronze is used; the tablet in most cases is affixed to a field-stone cairn or a cut-stone monument, although in some instances it is placed on an existing structure associated with the site.

Among the outstanding historic sites preserved and maintained by the National Parks Bureau, the Fortress of Louisbourg in Cape Breton takes high place, for here were enacted the early stages of the long struggle which culminated in the possession of Canada by the British Crown. Louisbourg was one of the most keenly disputed fortresses in North America. It was erected more than two centuries ago by the French, who had named the settlement in honour of Louis the Fourteenth, King of France. It was captured by the British forces in 1745, but was subsequently handed back to the French. It was again besieged by the English and finally captured by them in 1758. It is interesting to recall that one of the brigades of infantry engaged in the recapture of Louisbourg was commanded by General Wolfe, who was later to die heroically at Quebec. Most of the original area of the fortress has now been acquired by the Dominion Government. Careful excavation work has been carried out and a museum established at the site. From a visit to this museum and a tour of the grounds the visitor can reconstruct in imagination a little of the historic past of Louisbourg.

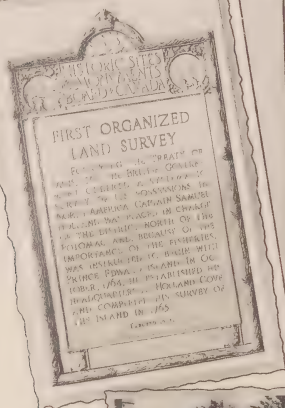
Another notable historic site in Nova Scotia is Fort Anne in Annapolis Royal. Before the Pilgrim Fathers landed at Plymouth Rock, a thriving village stood on the shores of the Annapolis Basin, and here one of the first vessels built on this continent unfolded its sails. Annapolis Royal, too, saw the departure of 1,600 Acadians in the expulsion of 1755, the event so strikingly portrayed in Longfellow's *Evangeline*. The museum building recently restored was originally the Officers' Quarters and was built in 1797-98 under the supervision of Edward, Duke of Kent, the father of

* Prepared under the direction of the National Parks Bureau, Department of Mines and Resources.

A FEW
CHARACTERISTIC HISTORIC SITES
AND MONUMENTS
IN CANADA



TYPICAL MEMORIALS AND TABLETS USED IN MARKING HISTORIC SITES



(For description see page 4.)

CHARACTERISTIC HISTORIC SITES AND MONUMENTS.

Left of the double-page layout reading downwards—(1) The Jacques Cartier Memorial Cross at Gaspé, Que. Here Cartier landed on July 24, 1534, and laid claim to the land for the King of France; the cross was erected on the occasion of the 400th. anniversary of the landing. (2) Interior view of Fort Chambly, on the Richelieu river about 20 miles south-east of Montreal. The first wooden fort on this site was built by the French in 1665 as a protection against the Iroquois. The inset view shows the caretaker's quarters and part of the museum. (3) Fort Wellington, at Prescott, Ont. completed in 1838, was built as a main base for the defence of communications between Kingston and Montreal after the experiences of the War of 1812-14. The picture shows the old blockhouse and officers' quarters.

*Upper centre—*Fort Anne, at Annapolis Royal, N.S., associated with early French settlement on the shores of Annapolis Basin. The picture shows officers' quarters (now the museum) viewed through the old gate. These quarters, recently restored, were originally built in 1797-98 under the supervision of Edward, Duke of Kent, the father of Queen Victoria. Inset is a view of Fort Louisbourg, on Cape Breton island. The original French settlement at Fort Louisbourg was established in 1713 and it became one of the most keenly disputed fortresses in North America.

*Lower centre—*An interior view of the museum at Fort Beauséjour, near Sackville, N.B., showing the old Beaubassin church bell.

Right, reading downwards—(1) Reproduction of an old print of Fort Walsh, Sask.—a North West Mounted Police post, built in 1875, to establish Canadian authority among the Indians of the Cypress hills. (2) Fort Prince of Wales, the old Hudson's Bay Company fort near Churchill, Man., with an inset showing the gateway of old Fort Garry, another early Hudson's Bay Company post established on the Red river, where the city of Winnipeg now stands. (3) The obelisk near Bella Coola, B.C., marking the spot where Sir Alexander Mackenzie reached the shores of the Pacific ocean to complete the first overland crossing of continental North America. The inset shows the remaining building of Fort Langley, established by the Hudson's Bay Company in 1827 to control the trade of the lower Fraser river and Puget sound. It was the first post of the Company on what is now the British Columbia coast.

TYPICAL MEMORIALS AND TABLETS.

The single-page layout at the left shows several forms of memorials that have been erected to mark historic sites in Canada. At the top is shown a boulder cairn with tablet affixed. This particular cairn marks the site of Jasper House at Jasper National Park, Alta. At left centre is a view of a typical bronze tablet and at right centre is the obelisk memorial at Chrysler's Farm battlefield site, near Morrisburg, Ont. The lowest picture shows a cut-stone monument, this being the Bishop Macdonell Memorial at St. Raphael, Ont. The sketches show (top) the monument to Sieur de Monts at Annapolis Royal, N.S. and (bottom) the memorial erected to the memory of Madeleine de Verchères at Verchères, Que.

Queen Victoria, when he was Commander-in-Chief of the British Forces in North America with headquarters at Halifax, Nova Scotia.

In New Brunswick, the site of Fort Beauséjour has been acquired. Built by the French, the fort was intended to be an Acadian stronghold against the undefined claims of the English to Acadia. Around the fort, Acadians had their homes and farms. It was captured by the British in 1755 and renamed Fort Cumberland. Restoration work in connection with the ruins of the fort has been carried out and a new museum built at the site.

Another historic fortress which has been placed under the care of the National Parks Bureau is Fort Chambly in the province of Quebec. Fort Chambly lies about twenty miles southeast of Montreal on a conspicuous headland on the Richelieu river. The first fort, built as a protection from the terror of the Iroquois by the French in 1665, was of wooden construction. After many vicissitudes, it was rebuilt of stone, this work being completed in 1711. In 1760 the fort was surrendered to the British who, with a small armed force, held it until 1775. In that year the Americans captured the fort; they evacuated it the following year, but burned everything that was combustible leaving only the four walls standing. The fort was later repaired and garrisoned by Governor Carleton and played an important part in the War of 1812. Under the administration of the National Parks Bureau, steps have been taken to arrest the disintegration of the massive structure and a new museum building has been erected within the walls of the fort.

On an island in the Richelieu river about ten miles from the United States border is the site of another fortress erected by the French, Fort Lennox, on Ile-aux-Noix. The present fort, which was rebuilt by the Imperial authorities in the period from 1812 to 1827, is administered by the National Parks Bureau, and stands majestically in memory of the defence of the Richelieu Gateway.

Fort Wellington, at Prescott, Ontario, which is also under the care of the National Parks Bureau, remains as it was when finally completed in 1838, an impressive landmark. Named after the great Duke of Wellington, it was erected when the British authorities decided to fortify Prescott as one of the most vulnerable points of attack in the War of 1812 and as the main base for the defence of communications between Kingston and Montreal. The fort is now an object of great interest to tourists and is visited annually by thousands of people.

In Manitoba, Fort Prince of Wales, opposite the port of Churchill, has been acquired. This, the most northerly fortress on the American continent, was built in the years between 1733 and 1771 in order to secure control of Hudson bay for the Hudson's Bay Company. It was surrendered to, and partially destroyed by, a French naval force in 1782. Its ruins, which are among the most interesting military remains on the continent, are gradually being restored.

The following are other sites which have been marked and are being maintained by the National Parks Bureau. Locations are approximate and all are marked by bronze tablets, though this fact is not specifically mentioned in the description when a cairn or monument has been erected on the site.

PRINCE EDWARD ISLAND.

Brudenell Point.—Cut-stone monument to mark the site where Jean Pierre Roma founded a base for control of the Gulf fisheries and for trade with France, Quebec, and the West Indies, 1732.

Charlottetown.—*Provincial Legislature Grounds*—Cut-stone monument to commemorate the four-hundredth anniversary of the landing of Jacques Cartier on the Island, 1534; also a cut-stone monument to commemorate the distinguished

PRINCE EDWARD ISLAND—concluded.

service to navigation of Admiral Henry Wolsey Bayfield, 1795-1885. *Provincial Building*—Tablets to commemorate: (a) the laying of the first submarine telegraph in America, 1852; and (b) outstanding historical events connected with the Island.

Rocky Point.—*Near South Shore Road*—Cairn to commemorate the events connected with the survey of Prince Edward Island by Captain Samuel Holland in 1764-65.

NOVA SCOTIA.

Annapolis Royal.—*Fort Anne Park*—Cut-stone monument to commemorate the services of Samuel Vetch, Adjutant-General of the force which captured Port Royal, 1710, and who later was a notable figure in colonial history; also a cut-stone monument to commemorate the faithful services of Jean Paul Mascarene, 1684-1760, a French Huguenot in the army of Britain.

Bridgetown.—Cairn to commemorate the two combats at Bloody Creek in 1711 and 1757 between the British garrison at Annapolis Royal and allied French and Indians.

Canso.—*Public School Grounds, School St.*—Cairn to commemorate its fortification by the British in 1720 and later combats between them and the French and Indians.

Englishtown.—*Ste. Anne, Baddeck, Cape North Highway*—Cairn to commemorate settlement established by Captain Charles Daniel, 1629, and selection as a naval base, 1713, when it was named Port Dauphin.

Fort La Have.—*Lighthouse Reserve, Mouth of La Have River*—Cairn to mark the site of the fort built by Isaac de Razilly, where the capital of the colony was established.

Fort Lawrence.—*Main Highway from Sackville to Amherst*—Cairn to mark the site of the fort built by the British, 1750, for the defence of the isthmus of Chignecto.

Halifax.—*Admiralty House Grounds*—Cut-stone monument in honour of the officers and men of H.M.S. *Shannon*, which defeated the United States frigate *Chesapeake* off Boston harbour, June 1, 1813. *Bedford and French Landing Roads*—Cairn to mark the site of the encampment of the storm-shattered expedition sent from France in 1746, under Admiral the Duc d'Anville. *Naval Barracks*—Monument on small green to mark the site of the first Royal Dockyard in what is now the Dominion of Canada. *Post Office Building, Hollis St.*—Tablet to commemorate the establishment of the first Post Office in Canada, 1755. *Province House*—Tablet to mark the site of the first printing press in British North America.

Kennington Cove.—*Near Louisbourg Highway*—Cairn to mark the landing place of Brig.-Gen. James Wolfe's Brigade, June 8, 1758.

Liverpool.—*Fort Point Park*—Cairn to the memory of the Privateersmen of Liverpool bay, who maintained and defended their trade with the West Indies and waged successful war upon the enemies of Great Britain, in ships fitted and armed at their own expense.

Lower Granville.—Cairn to mark the site of the first fort or "habitation" of Port Royal, built in 1605 by the French under de Monts and Champlain.

North Sydney.—*Western Union Telegraph Company's Cable Building*—Tablet to commemorate the successful laying of a submarine telegraph cable between Cape Breton and Newfoundland, 1856.

Port la Tour.—*Near Bacarra Point, Port la Tour Highway*—Cairn to mark the site of the last foothold of France in Acadia, built prior to 1627.

Port Morien.—*Long Beach Road*—Cairn to mark the site of the first regular coal-mining operations in America, established by the French, 1720.

St. Peters.—*Canal Reserve*—Cairn to mark the site of Nicolas Denys' fort and trading post, 1650, and to commemorate the construction of the St. Peter's canal.

Shelburne.—*Foot of King St.*—Boulder to commemorate the founding of the town by United Empire Loyalists, 1783.

Sydney.—*Post Office Building*—Tablet to commemorate the public services of Joseph Frederick Wallet des Barres, 1722-1824, a distinguished military engineer.

NOVA SCOTIA—concluded.

Wallace Bridge.—*Main Highway from Wallace to Pugwash*—Cut-stone monument to mark the birthplace of Simon Newcomb, one of the world's greatest scientists.

Windsor.—*King's College Grounds*—Tablet on chapel to mark the site of the oldest university in the King's Overseas Dominions, founded in 1789. *King St.*—Cairn on military reserve to mark the site of Fort Edward, built by the British in 1750. *King's Square*—Cut-stone monument to commemorate the literary achievements of Thomas Chandler Haliburton, 1796-1865. *Park between King and Gerrish Sts.*—Cut-stone monument to commemorate the events connected with the first agricultural fair in Canada, which was held on Fort Edward Hill, May 21, 1765.

NEW BRUNSWICK.

Aulac.—Fort Beausejour Park—Monument to mark the site of Tonge's island, once the capital of Acadia. Monument in memory of settlers who came to Chignecto from Yorkshire, England, 1772-76.

Bathurst.—*Main and Murray Sts.*—Cairn to commemorate the services of Nicolas Denys, appointed Governor and Lieutenant-General of the coasts and islands of the gulf of St. Lawrence from Canso to Gaspe, 1654.

Campbellton.—*Riverside Park*—Cairn to commemorate the last naval battle of the Seven Years' War in North American waters, 1760.

Devon.—*Gibson and Albert Sts.*—Cairn to mark the site of Fort Nashwaak, erected by Governor Villebon, 1692.

Fredericton.—*Parliament Buildings*—Tablet to the memory of Sir Howard Douglas, Lieutenant-Governor of New Brunswick, 1823-31. *Brunswick and King Sts.*—Cut-stone monument in public park to commemorate the distinguished services of the 104th New Brunswick Regiment in the defence of Canada in 1813-14.

Hillsborough.—*Near C. N. R. Station*—Cut-stone monument to commemorate the engagement which took place near there, Sept. 3, 1755.

Lower Jemseg.—*Main Highway*—Cut-stone monument to mark the site of Fort Jemseg built in 1659 by Thomas Temple during the English possession of Acadia.

Minto.—*Near C.P.R. Station*—Monument to commemorate the first export of coal, before middle of 17th century.

North West Bridge.—*Newcastle-Fredericton Highway*—Cairn to commemorate events connected with Beaubears island which served as a concentration camp for refugee Acadians, 1756-59.

Petitcodiac.—*Moncton-Saint John Highway*—Cut-stone monument to mark the ancient Indian portage route from Acadia to the Upper St. John and Quebec, which was later used by the French.

Port Elgin.—Cairn to mark the site of Fort Gaspereau built by French troops, 1751, renamed Fort Monekton, 1755.

Saint John.—*West Saint John*—A boulder on Town Hall Square to mark the site of Fort Charnisay, built by Sieur d'Aulnay de Charnisay, 1645. Also tablet on Martello Tower, built for the defence of Saint John during the War of 1812-14, which is being preserved as an example of that type of fortification. *Fort Howe Grounds*—Cairn to commemorate the public services of Major Gilfrid Studholme who built Fort Howe in 1778 and was its commander. Also tablet on Rockland Road to mark the site of Fort la Tour, erected by Charles de la Tour, 1631. *Royal Hotel*—Tablet to mark the site of Mallard House, in which the first Legislature of New Brunswick met in February, 1786. *Customs House Building*—Tablet to commemorate the first compound marine engine designed by Benjamin Tibbits, built in 1842. Also tablet to commemorate the invention of the first steam fog horn by Robert Foulis, 1854. *King Square*—Granite cross to commemorate the founding of the province, Aug. 16, 1784. *Market Square*—Boulder to mark the site of the landing of United Empire Loyalists, 1783.

Westfield.—*Fredericton-Saint John Highway*—Cairn to mark the site of Fort Boishebert (Nerepis), an ancient Indian stronghold strengthened by the French in 1749 and used by them against the British.

Woodstock.—*Highway, Ten Miles South of City*—Cairn to mark the site of Fort Meductic, chief Maliseet stronghold in Acadia in the 17th and 18th centuries.

QUEBEC.

Allan's Corners.—Granite obelisk to commemorate the Battle of Châteauguay, Oct. 26, 1813.

Beauport.—*Royal Ave.*—Tablet affixed to house in which Lieut.-Col. Charles de Salaberry, the hero of Châteauguay, was born, Nov. 19, 1778.

Cabano.—*Caldwell Road*—Cairn to mark the Témiscouata portage, longest and most difficult on the overland route between Acadia and Quebec.

Cap Rouge.—Cairn to mark the site of Fort Charlesbourg Royal, built by Jacques Cartier, where he spent the winter of 1541-42.

Carillon.—*Canal Reserve*—Cairn to commemorate the construction of the Carillon canal.

Cascades Point.—*Main Highway*—Cairn to commemorate the events connected with the construction of the Soulanges canal in 1892-1900, to overcome the Cascades, Cedars, and Coteau rapids.

Caughnawaga.—Tablet on east wall of the old fort to commemorate the events connected with the construction of Fort St. Louis in 1725.

Cedars.—*Cedars-Cascades Point Road*—Cairn to mark the site of the Battle of the Cedars, May, 1776, between Canadian and American troops.

Chambly.—*Canal Reserve*—Cairn to commemorate the construction of the canal, connecting lake Champlain with the St. Lawrence river. *Chambly-St. Johns Highway*—Boulder to mark the site of Fort Ste. Thérèse, built in 1665 for defence against the Iroquois.

Coteau-du-Lac.—Cairn to mark the site of the fort and blockhouse built for the protection of the canal constructed in 1779-80.

Frelighsburg.—*Main Highway to Franklin, Vt.*—Monument to commemorate the battle of Eccles Hill, May 25, 1870, between Fenian Raiders and Canadian volunteers.

Gaspe.—*Main Highway*—Thirty-foot granite cross to commemorate the four-hundredth anniversary of the landing of Jacques Cartier, July 24, 1534.

Grenville.—*Canal Reserve*—Cairn to commemorate the construction of the Grenville canal.

Howick.—*Montreal-Malone Highway*—Cairn to commemorate the battle of Châteauguay Ford, between Canadian and American troops, Oct. 26, 1813.

Hull.—*Eddy Park*—Cairn to mark the site of the first portage of the Chaudière, traversed by Champlain and other early explorers.

Ile-aux-Coudres.—Granite cross to mark the site where Jacques Cartier landed, Sept. 6, 1535.

Ile-aux-Noix.—*Fort Lennox*—Tablets to commemorate the battle of Ile-aux-Noix, June 3, 1813, which resulted in the capture of two United States sloops and in memory of the officers, soldiers, and seamen of the Royal Navy and Provincial Marines who fought on lake Champlain during the years 1776-77 and 1812-14.

Kingsmere.—*King Mountain.*—Cairn to mark the site of the first Geodetic Survey station, established in 1905.

Lachine.—*Highway No. 2*—Cairn to commemorate the construction of the Lachine canal. *St. Joseph St.*—Cut-stone monument to commemorate the events connected with the massacre of the inhabitants by Indians on the night of Aug. 4-5, 1689. *Opposite City Hall*—Monument to commemorate the services of Robert Cavalier de La Salle, who founded Lachine in 1667.

Lacolle.—*Highways Nos. 14 and 52*—Cairn to commemorate the battle of Lacolle, Mar. 30, 1814.

Laprairie.—*Foch Square*—Cairn to mark the site of Fort Laprairie, 1687, a refuge for the settlers during a quarter-century of wars. *Intersection of the Chambly-St. Philippe and Laprairie-St. Johns roads*—Cairn to commemorate the second battle of Laprairie, Aug. 11, 1691.

Les Vieilles Forges.—*Three Rivers and Les Vieilles Forges Roads*—Cairn marking the site of the St. Maurice Forges, established by Poulin de Francheville, 1730.

QUEBEC—continued.

Lévis.—*230 St. Laurent St.*—Tablet to mark the place where Louis Frechette, the Canadian poet, was born, Nov. 16, 1839.

Longueuil.—*Church of St. Antoine de Longueuil*—Tablet to mark the site of the stone fort built by the French, 1685-90.

Montreal.—*Molson's Brewery, Notre Dame St. E.*—Tablet to mark the site where the *Accommodation*, the first steamship in Canada, was built in 1809. *McGill Campus, Sherbrooke St.*—Boulder to mark the site of Hochelaga, the fortified Indian village visited by Cartier in 1535. *Customs Building, Youville Square*—Tablet to mark the site where Sieur de Maisonneuve laid the foundation of Montreal, May 18, 1642. *St. Paul and St. Sulpice Sts.*—Tablet to mark the birthplace of Pierre Le Moyne, Sieur d'Iberville, July 20, 1661.

Notre Dame de Pierreville.—*Main Road*—Cairn to mark the site of Fort Crevier, built in 1687, and to commemorate the battles which took place there, 1689 and 1693.

Odelltown.—Cairn to perpetuate the memory of the officers and men of the loyal Militia of Canada who took part in the battle of Odelltown, Nov. 7-9, 1838.

Percé.—*Logan Park*—Tablet to the memory of Sir William Logan, founder and first Director of the Geological Survey of Canada.

Quebec.—*Laval University Building*—Tablet to mark the site of the Quebec Seminary, the oldest educational house for boys in Canada, established in 1663. *Princess Louise Docks*—Tablet on waiting room to record the opening of the river St. Lawrence to the shipping of all nations, Jan. 1, 1850. *Hôtel Dieu, Charlevoix St.*—Tablet to mark the site of the first hospital established in America north of Mexico, which was founded Aug. 16, 1637. *Laval-Montmorency Park, Côte de la Montagne St.*—Tablet on stone wall at entrance to commemorate the events connected with the issue of the first patent in Canada, June 8, 1824.

Rivière des Prairies.—*Main Highway*—Cairn to mark the site of the battle of Coulee Grou, July 2, 1690, between the French and Iroquois.

St. Andrews East.—*Town Park*—Cairn to mark the site of the first paper mill in Canada, built by a group of New Englanders, 1803-5.

St. Hubert.—*Chambly Highway*—Cairn near entrance to airport to mark the site of Chambly Road, the first highway of importance in Canada, which was opened in 1665.

St. Johns.—*C. N. R. Station*—Tablet to mark one terminal of the first railway in Canada which ran from St. Johns to Laprairie and which was opened for traffic, July 21, 1836. *Champlain St.*—Boulder to mark the site of Fort St. Jean, built by the French, 1748, and rebuilt by the British, 1775. In the latter year it withstood a forty-five day siege by American troops. *St. John's Golf Club*—Cairn to commemorate the battle of Montgomery Creek, Sept. 6, 1775, when a group of Canadian militia and Indians defeated invading American troops.

St. Lin.—Cairn in front of Town Hall in memory of Sir Wilfrid Laurier, 1841-1919. Sir Wilfrid was born here on Nov. 20, 1841.

St. Louis de Blandford.—Monument to Charles Héon who settled there Mar. 14, 1825. His pioneer efforts paved the way for many who followed.

St. Patrick.—*Highway No. 2*—Tablet on iron standard to mark the place where Sir John A. Macdonald spent many of his summers between 1873 and 1890.

Senneville.—*Adjacent to Gouin Boulevard*—Cairn to commemorate the battle of the Lake of Two Mountains, 1689, when French troops defeated a band of Iroquois.

Sorel.—*Canada Steamship Lines Wharf*—Cairn to mark the site of Fort Richelieu, built by Pierre de Saurel, 1665, which proved an important defence post against the Iroquois.

Tadoussac.—*Front St.*—Cairn to mark the site of the oldest French establishment and Christian mission station in Canada.

Three Rivers.—*City Hall*—Tablet to commemorate the services of Benjamin Sulte, historian and poet, 1841-1923. *Customs Building*—Boulder to mark the site

QUEBEC—concluded.

of Fort Three Rivers, built by the French, 1634, which became a centre for fur trade with the Indians. *Lejeune St.*—Boulder to commemorate the battle of Three Rivers, June 8, 1776, when British troops repulsed an attack by an American column.

Verchères.—Large monument with bronze statue, near the St. Lawrence river, to Madeleine de Verchères, who for eight days defended, against the Iroquois, the fort which stood there in 1692.

Ville La Salle.—*La Salle Boulevard*—Cairn in front of Novitiate Building to mark the site of the fief granted to La Salle in 1669, from which he started on his distant expeditions.

ONTARIO.

Adolphustown.—*Hay Bay*—Cairn to the memory of Sir John A. Macdonald. There he drew inspiration to weld together the weak and scattered colonies of the day into a strong and ambitious Dominion.

Allanburg.—*Near the Bridge*—Cairn to mark the site where the first sod of the old Welland canal was cut, Nov. 30, 1824.

Amherstburg.—*Waterworks Park*—Monument to the memory of those who served on lakes Erie and Huron in the defence of Canada during the War of 1812-14, and to mark the site of the Navy Yard.

Bath.—*Adjacent to the Public Road*—Cairn to mark the site where the *Frontenac*, the first steamship that navigated lake Ontario, was built. It was launched Sept. 7, 1816.

Bay of Quinte.—*Intersection of the Trenton and Carrying Place Roads*—Cairn to commemorate the treaty concluded with the Mississauga Indians, 1787, by which a large tract of land on the north shore of lake Ontario was ceded to the Crown for settlement purposes.

Blenheim.—*Entrance to Town Park, Highway No. 3*—Cairn to commemorate the treaty concluded with the Indians in 1790, whereby a great tract of land was acquired to provide homes for expatriated United Empire Loyalists.

Bridgeburg.—*Niagara Boulevard*—Boulder to mark the site of the battle of Frenchman's Creek, Nov. 27, 1812, and to mark the landing place of the Fenian Raiders, May 31, 1866.

Chatham.—*River Road*—Cairn to commemorate the engagement at McRae's House, Dec. 15, 1813.

Chippawa.—*Niagara Boulevard*—Boulder in memory of the officers and men killed in the battle of July 5, 1814, and a boulder to mark the site of the shipyard on Navy island where the first vessels to navigate the Upper Lakes under the British flag were built, 1763-64.

Christian Island.—Boulder to mark the site of Fort Ste. Marie II, the Jesuit Mission to the Hurons, 1649-50. Here the Huron nation made its last stand against the Iroquois, 1649-51.

Cornwall.—*Highway No. 2*—Cairn to mark the site of Glengarry House, the home of Lieut.-Col. John Macdonell, a gallant and distinguished officer in the War of the American Revolution, 1775-84; he was later first Speaker of the Legislative Assembly of Upper Canada. *Collegiate Institute, Sydney St.*—Tablet to commemorate the distinguished public services of Hon. and Rt. Rev. John Strachan, 1778-1867, who opened his famous grammar school in Cornwall, 1803. *Post Office Building*—Tablet in commemoration of the unswerving fidelity and eminent services of the pioneer Loyalists who subdued the wilderness and laid the foundations of the present province of Ontario.

Deseronto.—*Tyendinaga Indian Reserve*—Cairn to commemorate the arrival, May 22, 1784, of a band of Mohawk Indians, expelled from their homes in the Mohawk valley for their fidelity to the unity of the Empire.

Dundas.—*Governor's Road*—Cairn to commemorate the events connected with Dundas Street, which was planned to promote the settlement of the province by Lieutenant-Governor Simcoe, 1793.

ONTARIO—continued.

Edenvalle.—*Highway No. 26*—Cairn to mark the site of Glengarry Landing, where Lieut.-Col. Robert McDouall built the flotilla of boats with which he effected the relief of the British garrison at Fort Michilimackinac, May, 1814.

Fort Erie.—*Ruined Walls of Old Fort*—Two tablets, one setting forth its history, the other commemorating the capture of the United States ships of war *Ohio* and *Somers*, on lake Erie, Aug. 12 and 13, 1814.

Fort William.—*Heath Park*—Cairn to commemorate the early historic events which took place in that city. *Kaministiquia River*—Cairn to mark the site of the canoe landing and the beginning of the long portage to the west. It was used by the Indians for ages and later by French, British, and Canadian discoverers, explorers, and traders.

Goderich.—*Entrance to Town, Highway No. 8*—Tablet to commemorate the life work of the men and women in the Huron Tract during the years 1828-1928.

Hamilton.—*Harvey Park*—Monument to mark the site of the fortification built on Burlington Heights for the defence of the Niagara peninsula during the War of 1812-14.

Iona.—Tablet on stone gateway to mark the site of Southwold Earthworks, the only double-walled Indian earthwork known in Canada.

Kingston.—*Whig Publishing Company Building, King St.*—Tablet to mark the site of St. George's Anglican Church, in which the first meeting of the Executive Council of the Province of Upper Canada was held, July 8, 1792. *Macdonald Park*—Murney Tower, erected by the Royal Engineers, 1840-46 for the defence of Kingston. *Gateway of Tête du Pont Barracks*—Tablet to mark the site of Fort Frontenac, built by Count Frontenac, July, 1673, and rebuilt by La Salle in 1675. Also a tablet to commemorate the treaty concluded with the Mississauga Indians, 1783, whereby a large tract of land was obtained for the settlement of the Loyalists. *Kingston Harbour*—Martello Shal Tower, built about 1845 to complete the defences of the Port of Kingston as the chief naval station on lake Ontario. *Rideau St., No. 102*—Tablet to mark the stone house where Sir John A. Macdonald lived as a boy. *Kingston General Hospital Grounds*—Cut-stone monument to commemorate the public services of Lord Sydenham and Sir Charles Bagot, Governors-in-Chief of United Canada. *Royal Military College Grounds*—Tablet on Frigate Building to mark the site of the British naval station for lake Ontario, 1788-1818. *Highway No. 2, Barriefield*—Cairn at entrance to Fort Henry to commemorate the services of the officers and seamen of the Royal Navy who served on lake Ontario during the War of 1812-14.

Kitchener.—*Memorial Tower, Grand River, opposite Doon*—Tablet to commemorate the pioneers of the county of Waterloo.

Leamington.—*Point Pelee National Park*—Cairn to commemorate a number of early historic events which occurred at Point Pelee.

Lyndhurst.—*Adjacent to Public Road*—Cairn to mark the site of the Lansdowne Iron Works, built in 1801 and which operated there for ten years.

Maitland.—*Highway No. 2*—Cairn to mark the site of the shipyard at Pointeau-Baril, in which were built the last French ships of war which navigated lake Ontario.

Mallorytown Landing.—*National Park Reserve*—Cairn to mark the site of Bridge Island, which was fortified and garrisoned in 1814 for the protection of the vital line of supply by water from Lower Canada.

Mattawa.—*Memorial Park*—Cairn to mark the site of the historic canoe route from Montreal to the Great Lakes and beyond, which was used by early explorers and traders.

Morrisburg.—*Highway No. 2*—Granite obelisk in memory of the officers and men killed at the battle of Chrysler's Farm,* 1812.

Nanticoke.—*School House*—Tablet to commemorate the engagement of Nov. 13, 1813, when the Norfolk militia routed a band of enemy marauders.

Niagara-on-the-Lake.—*Military Reserve*—Tablet on outer wall of Fort Mississauga, built in 1814 for the defence of that frontier, and occupied until 1845.

*The name is spelled "Chrysler" on the tablet erected, but "Crysler" is the proper form of the name as written by Captain Crysler, himself.

ONTARIO—continued.

Also cairn to mark the site of Fort George, built 1797-1801, captured by an invading army during the War of 1812-14, and later regained and maintained as a military post until 1845. *Queen St.*—Cairn to commemorate the battle of Fort George, May 27, 1813. *Niagara Historical Museum*—Tablet to commemorate the treaties concluded with the Indians, 1781 and 1784, by which a large tract of fertile land was purchased for settlement purposes. *Butler's Burying Ground*—Monument in memory of the officers and soldiers of Butler's Corps of Rangers, 1777-84, and to commemorate the action at Butler's Farm, July 8, 1813.

Normandale.—*Fish Hatchery*—Tablet to mark the site of the old furnace founded by Samuel Mason, 1818, which remained in operation until the local supply of bog ore was exhausted, about 1853.

Ohsweken.—*Council House Grounds*—Cut-stone monument to commemorate the loyal services of the Six Nations of Iroquois Indians to the British Empire.

Ottawa.—*Bridge near Chateau Laurier*—Tablet to commemorate the events connected with the construction of the Rideau canal. *Entrance to Dominion Archives*—Tablet in memory of those who perished on Canadian Arctic Expeditions, 1913-18. *Dominion Archives*—Tablet in commemoration of the valour and sacrifice of Allan Rudyard Crawford, commander and scientist of an Arctic expedition to Wrangel island, 1921-23. *Nepean Point*—Monument to commemorate the services of Samuel de Champlain, the first great Canadian.

Penetanguishene.—*Huron Park*—Cairn to commemorate the events connected with the capture of the United States warships, *Tigress* and *Scorpion*, Sept. 3-6, 1814.

Port Arthur.—*Gore Park*—Cairn to commemorate early historic events. Wolseley's Red River Expeditionary Force camped here May 19, 1870.

Port Dover.—*Near Quay St.*—Cross to mark the place where Dollier and Galinee landed in March, 1670, and erected a cross with the Arms of France, claiming possession of the lands of the Lake Erie district for the King of France. *Black Creek*—Cairn to mark the place where Dollier and Galinee, with seven other Frenchmen, the first Europeans known to have ascended the Great Lakes, wintered, 1669-70. *Powell Park*—Cairn to mark the point from which General Brock set out with his small army, Aug. 8, 1812, to relieve the invaded western frontier.

Port Stanley.—*Intersection of Bridge, Main, and Colburne Sts.*—Cairn to commemorate the historic events which took place in that vicinity.

Port Talbot.—*Talbot Road*—Cairn to mark the site of the residence of Hon. Col. Thomas Talbot, who there began, in 1803, the foundation of the Talbot Settlement.

Prescott.—*Highway No. 2*—Cairn to mark the site of Fort de Lévis, built by the French on Ile Royale in the St. Lawrence river, 1760. *Lighthouse Tower, Shore of St. Lawrence*—Tablet in memory of officers and men killed at the battle of the Windmill, Nov. 13, 1838.

Queenston.—*Niagara Boulevard*—Boulder to mark the site of Vrooman's Battery, engaged in the battle of Queenston Heights, Oct. 13, 1812.

Queenston Heights Park.—Boulder to mark the site of Fort Drummond, built in 1814 for the defence of the Niagara frontier, and named after Sir Gordon Drummond.

Richmond.—*Richmond Road*—Cairn in memory of the services and tragic death of Charles Lennox, fourth Duke of Richmond, who died there Aug. 28, 1819.

Richmond Hill.—*Highway No. 11*—Cairn to commemorate the events connected with the construction of Yonge Street, the military road and highway built in 1794-96, between lakes Ontario and Huron, to promote the settlement of the province.

Ridgeway.—*Main Highway*—Cairn in memory of the officers and men who fought against Fenian Raiders, June 2, 1866.

St. Joseph's Island.—Tablet on old chimney to mark the site of Fort St. Joseph, the most westerly military post in Upper Canada, built 1796-99. It was garrisoned until 1812 and became a noted trading station and resort for Indians.

ONTARIO—concluded.

St. Raphael.—Cut-stone monument to commemorate the public services of Hon. and Rt. Rev. Alexander Macdonell, 1760-1840.

Sandwich.—*Intersection of Sandwich and Main Sts.*—Cairn to mark the site from which Gen. Brock's troops embarked to attack Fort Detroit, Aug. 16, 1812.

Sault Ste. Marie.—*Huron Street*—Cairn to mark the site of the first Sault Ste. Marie canal, which was in use for canoes and bateaux before 1802.

South Lancaster.—*Monument Island, St. Lawrence River*—Cairn erected by the members of the Glengarry Militia who took part in the suppression of the Rebellion of 1837.

Stamford.—*Village Green*—Boulder to mark Niagara portage road, opened by United Empire Loyalists, 1788, which was the principal route of travel to Upper Lakes region until the opening of the Welland canal, 1829.

Thorold.—*Niagara Falls - Hamilton Highway*—Cairn to commemorate the battle of Beaver Dams, June 24, 1813.

Toronto.—*Near Province of Ontario Building, Exhibition Grounds*—Tablet in memory of the officers and men killed in action in the defence of the capital of Upper Canada, April 27, 1813. *Postal Station "K", North Yonge St.*—Tablet to mark the site of Montgomery's Tavern, the original headquarters of William Lyon Mackenzie, leader in the Upper Canada Rebellion. *Old City Hall Building, Front St.*—Tablet commemorating the first electric telegraph line in Canada, which ran between Toronto and Hamilton, inaugurated Dec. 19, 1846. *Parliament Buildings*—Tablet to commemorate the eminent public service of Sir Gordon Drummond, who administered the Government of the province, 1813-15.

Turkey Point.—*Normandale-St. Williams Highway*—Cairn to mark the site of Fort Norfolk, British military and naval station, 1814-15.

Victoria Harbour.—*Mission of St. Ignace*—Cairn to mark the site of the palisaded Huron village and Jesuit mission which were destroyed by the Iroquois, March, 1649.

Wardsville.—*Highway No. 2*—Cairn to mark the site of the battle of the Longwoods which took place at Battle Hill, Mar. 4, 1814.

Wasaga Beach.—*Wasaga Ave.*—Cairn to mark the site of Fort Nottawasaga, a blockhouse built in 1814 and destroyed the same year by enemy forces after a spirited defence.

Welland.—*Main Highway*—Cairn in memory of the officers and soldiers killed at the battle of Cook's Mills, Oct. 19, 1814.

Windsor.—*Dominion Bank Building, facing Ouellette Ave.*—Tablet to mark an important terminal of the "Underground Railway" which functioned prior to the Civil War in the United States, and which was the means of many coloured people finding a haven and freedom in Canada.

MANITOBA.

Churchill.—*Battery Point*—Cairn to mark the site of Port Churchill, discovered in 1619 by the ill-fated Danish expedition under Jens Munck. The first fort was built there by the Hudson's Bay Company in 1689. This was rebuilt in 1717, and for nearly two hundred years was the Company's most northerly post on the bay.

Fort Alexander.—*Hudson's Bay Company Post*—Cairn to mark the site of Fort Maurepas, one of La Vérandrye's trading posts built in 1738, and Fort Alexander, built by the Hudson's Bay Company in 1792.

Headingley.—*Portage la Prairie-Winnipeg Highway*—Cairn to mark the site of the first monument on the Dominion Lands Survey system. It was placed on the First Meridian, July 10, 1871.

Letellier.—*Jefferson Highway*—Cairn to mark the site of the War Road of the Sioux leading to the Lake of the Woods. It was the earliest route to the West. First used in 1733 by the French.

Lower Fort Garry.—*West Wall of Fort*—Tablet to commemorate the signing of Indian Treaty No. 1, Aug. 3, 1871, whereby the Chippewa and Swampy Cree Indians surrendered their rights to lands comprised within the boundaries of Manitoba as then existing.

MANITOBA—concluded.

Norway House.—*Hudson's Bay Company Post*—Cairn to mark the site of the post constructed in 1825. Here the Cree Syllabic system was invented and Treaty No. 5 made with the Indians in 1875.

Portage la Prairie.—*Near Pumping Station*—Cairn to mark the site of Fort La Reine, built by La Vérendrye, the French-Canadian explorer and discoverer, October, 1738.

The Pas.—*Devon Park*—Cairn in memory of Henry Kelsey, Hudson's Bay Company fur trader and explorer.

Wawanesa.—*Sunshine Highway*—Cairn to mark the site of seven forts, built by the North West, Hudson's Bay, and XY Companies between 1785 and 1828. From there ran the trade route to the Mandan country on the Missouri.

Winnipeg.—*Sir William Whyte Park*—Cairn to mark the site of Fort Douglas, headquarters of the first British Settlement west of the Great Lakes. *Main St.*—Cut-stone monument to commemorate the battle of Seven Oaks, between the rival fur-trading companies, June 19, 1816. *Gateway of Old Fort Garry, Main St.*—Tablet to mark the sites of Fort Rouge, established in 1738; Fort Gibraltar, built 1804; Old Fort Garry, headquarters of the Hudson's Bay Company after the coalition with the North West Company, 1821; and New Fort Garry, constructed 1836-39.

SASKATCHEWAN.

Batoche.—*Church Grounds*—Cairn to mark the site of the headquarters of the rebels during the North West Rebellion of 1885. Its capture by General Middleton in May of that year ended the uprising.

Battleford.—*Intersection of 24th St. and 2nd Ave.*—Cairn to commemorate the events which took place there during the North West Rebellion. Poundmaker and his band surrendered there May 26, 1885.

Carleton.—Cairn to commemorate the events connected with Indian Treaty No. 6, negotiated with the Crees by Commissioners of the Crown, whereby an area of 120,000 square miles of territory was surrendered.

Coulee.—Cairn to mark the site of Fort Walsh, a North West Mounted Police post, built in 1875, for the purpose of enforcing law and order among the hunting bands of Indians in the Cypress Hills.

Cut Knife Hill.—*Poundmaker Indian Reserve*—Cairn to commemorate the engagement which took place May 2, 1885, between Government troops and the Indians during the North West Rebellion.

Pelly.—Cairn to mark the site of Fort Livingstone, the first capital of the North West Territories, 1876-77. The first session of the North West Council was held there, Mar. 8, 1877.

Rosthern.—Cairn to commemorate the events connected with the engagement which took place at Fish Creek on April 24, 1885, during the North West Rebellion.

ALBERTA.

Calgary.—*Central Park*—Cairn to commemorate the arrival of the North West Mounted Police, August, 1875, and the establishment of their post on the west bank of the Elbow river.

Cluny.—*Blackfoot Indian Reserve*—Cairn to commemorate the signing of the treaty with the Indians, Sept. 22, 1877, whereby they surrendered their rights to 50,000 square miles of territory in the southwest corner of Alberta.

Edmonton.—*Near Provincial Administration Building*—Cut-stone monument to commemorate the services of the Alberta Field Force during the North West Rebellion. These operations averted the danger of an Indian uprising in Alberta.

ALBERTA—concluded.

Fort McMurray.—*Public School Grounds*—Cairn to commemorate the events connected with the ancient Methye portage trade route, discovered by Peter Pond in 1778 and used continuously for more than a century by fur traders and explorers.

Frog Lake.—*Cemetery*—Cairn to the memory of those massacred there April 2, 1885, by rebel Indians under Big Bear during the North West Rebellion.

Jasper National Park.—*Near Bridge over the Athabaska River*—Cairn to mark the site of Henry House, a post founded by the North West Company in 1811, which later became an important point in the transportation system. *Mouth of the Rocky River*—Cairn to mark the site of Jasper House, a post built by the North West Company between 1827 and 1829. *Old Fort Point, Eastern End of the Bridge over the Athabaska River*—Cairn to commemorate the public services of David Thompson.

L'Amoureux.—*Main Road*—Cairn to mark the site of Fort Augustus, established by the North West Company, 1794, and Fort Edmonton, established by the Hudson's Bay Company, 1795.

Lethbridge.—*Galt Park*—Cairn to mark the site of the first coal mine in Alberta, which was opened on the west bank of the Oldman river by Nicholas Sheran, 1872.

Macleod.—*Intersection of 2nd Ave. and 23rd St.*—Cairn to commemorate the arrival of the North West Mounted Police, October, 1874, and their establishment of this post, which brought law and order into a wild and lawless country.

Peace River.—*Lot 9, Shaftesbury Settlement*—Cairn to mark the site of Fort Fork, in which Sir Alexander Mackenzie wintered in 1792-93, and from which he set out on his quest for the Western Sea.

Rocky Mountain House.—*Main Highway*—Cairn to mark the site of the post built by the North West Company, 1799, which was occupied on different occasions by David Thompson.

Wetaskiwin.—*Edward St.*—Cut-stone monument to commemorate the public services of Rev. Father Lacombe and Rev. John McDougall whose influence with the Indians, during the troublous days of 1885, was a powerful factor in the preservation of peace in Alberta.

BRITISH COLUMBIA.

Alexandria.—*Cariboo Road*—Cairn to mark the site of Fort Alexandria, 1821, the last post established by the North West Company west of the Rocky mountains, and Sir Alexander Mackenzie's farthest point in the descent of the Fraser river, 1793.

Bamfield.—*Cable Building*—Tablet to commemorate the events connected with the laying of the British state-owned cable, the movement for which was initiated by Sir Sandford Fleming in 1879.

Barkerville.—*Main Road*—Cairn to commemorate the events connected with the centre of old Cariboo. The Cariboo gold fields, discovered in 1861, have been an important source of gold production.

Bella Coola.—*North Shore of Dean Channel*—Monument to mark the western terminus of the first journey across the continent of North America; it was reached by Alexander Mackenzie of the North West Company, with nine companions, on July 21, 1793.

Fort Steele.—*Fort Steele-Fernie Highway*—Cairn to mark the site of the first North West Mounted Police fort in British Columbia, 1887.

Friendly Cove.—*Entrance to Nootka Sound*—Cairn to commemorate its discovery in March, 1778, by Captain James Cook. Spain took possession in 1789 and maintained a settlement until 1795.

Hope.—*Intersection of Wallace and Water Sts.*—Cairn to mark the site of Fort Hope, built by the Hudson's Bay Company, 1848.

BRITISH COLUMBIA—concluded.

Kamloops.—*Riverside Park*—Boulder to mark the site of Fort Kamloops and in memory of the pioneer fur traders, who, by establishing themselves in that locality, aided in securing the country for Great Britain.

Kootenay National Park.—*Banff-Windermere Highway*—Cairn in recognition of the public services of Sir George Simpson, Governor of the Hudson's Bay Company's territories, 1821-60.

Langley.—*Mavis St.*—Cairn to mark the site of Fort Langley, the first trading post on the Pacific coast, built by the Hudson's Bay Company in 1827. The only remaining building has been acquired for preservation.

Nanaimo.—*Dallas Square*—Monument to mark the site of the first commercial coal mine in British Columbia, discovered in 1852.

New Westminster.—*Penitentiary Grounds*—Cairn to commemorate the early historic events associated with that city, which was the first capital of the Colony of British Columbia, 1859-68.

Prince George.—*Near Railway Station*—Cairn to commemorate the services of Sir Alexander Mackenzie, the first white man to cross the Rocky mountains and reach the Pacific coast.

Quesnel.—*Park on Front St.*—Cairn to commemorate the events connected with Collins' Overland Telegraph, and the plan to connect America and Asia by telegraph and cable across Bering strait, 1865-66.

Vancouver.—*Stanley Park*—Cairn to mark the place where the S.S. *Beaver*, the pioneer steamship on the Pacific ocean, was wrecked, July 26, 1888. *Marine Drive*—Monument to mark the place where Simon Fraser of the North West Company ended his dangerous exploration of the Fraser river from Fort George in July, 1808. *Near University of British Columbia*—Cut-stone monument to commemorate the first friendly meeting of the British and Spaniards in Pacific waters, June 22, 1792. *Marpole Park*—Cairn to mark the site of one of the largest prehistoric middens on the Pacific coast of Canada. Bone and stone implements and utensils found in it have thrown much light upon the culture status of prehistoric man in that vicinity.

Victoria.—*Gonzales Hill, Summit of a Rocky Point Adjacent to Denison Road*—Cairn to commemorate the exploration of the straits of San Juan de Fuca by the fur-trading companies and the British and Spanish Navies, 1787-92.

Yale.—*Near C.P.R. Station*—Boulder to mark the site of Fort Yale, one terminal of the Cariboo Wagon Road built in 1862-65, which extended northward four hundred miles to the gold mines of Cariboo.

YUKON TERRITORY.

Dawson City.—*Administration Building*—Tablet to the memory of the prospectors and miners who crossed the Chilkat and Chilkoot passes and paved the way for the discovery, in 1896, of the rich gold fields of the Yukon.

CHAPTER III.—CONSTITUTION AND GOVERNMENT.

The Government of the Dominion of Canada was established under the provisions of the British North America Act of 1867. This Statute of the Imperial Parliament, as from time to time amended, forms the written basis of the Constitution of Canada. Subsequent sections of this chapter describe in some detail the institutions and processes by which Canada is governed.

The several stages in the development of its status as a Dominion have been authoritatively described in the reports of successive Imperial Conferences including that held in London in 1926, which defined the group of self-governing communities consisting of Great Britain and the Dominions as "autonomous communities within the British Empire, equal in status, in no way subordinate one to another in any aspect of their domestic or foreign affairs, though united by a common allegiance to the Crown and freely associated as members of the British Commonwealth of Nations". That Conference also recognized that as a consequence of this equality of status, the Governor General of a Dominion "is the representative of the Crown, holding in all essential respects the same position in relation to the administration of public affairs in the Dominion as is held by His Majesty the King in Great Britain", and that "it is the right of the Government of each Dominion to advise the Crown in all matters relating to its own affairs". Simultaneously, with this change in the constitutional relationship between the several parts of the British Commonwealth of Nations, there developed as a complementary aspect of nationhood the assumption by the several Dominions of further responsibilities and rights of sovereign States in their relations with other members of the community of nations. Membership in the League of Nations, the exercise of treaty-making powers and the establishment of separate diplomatic representation in a number of foreign countries have characterized this phase in the growth of the Dominion of Canada. More explicit recognition of the implications of the principles of equality of status was accorded in the Statute of Westminster of 1931 which provided for the removal of the remaining limitations on the legislative autonomy of the Dominions.

PART I.—CONSTITUTION AND GENERAL GOVERNMENT.

Under the above heading a brief historical and descriptive account of the evolution of the general government of Canada was given on pp. 89-100 of the Canada Year Book, 1922-23.

PART II.—PROVINCIAL AND LOCAL GOVERNMENT.

Under the heading "Provincial and Local Government in Canada", a brief account of the government of each of the provinces of Canada and of its municipal institutions and judicial organization was published on pp. 101-115 of the 1922-23 edition of the Year Book.

Section 1.—The Government of Canada's Arctic Territory.*

The Arctic islands, which constitute part of Canadian territory, are situated to the north of her mainland. They comprise an area in excess of 500,000 square miles. They are a vast number of islands, the principal ones being Baffin, Victoria, Ellesmere, Banks, Devon, Southampton, Somerset, Prince of Wales, Melville, and Axel Heiberg.

These Arctic islands, known as the "Canadian Archipelago", were held previous to 1880 by Great Britain through right of discovery. In 1880 were transferred to Canada. From this date they have been part of Canadian territory. The Dominion first legislated with regard to them in October, 1895. This legislation divided what was then known as the Northwest Territories into four established districts. The District of Franklin included all the then known islands lying to the north of Canada. (Canadian Order in Council, Oct. 2, 1895.)

In 1904 a map was published by the Department of Interior, Canada, setting out practically all the activities of the early explorers and showing the boundary of Canada on the west as the 141st meridian of west longitude extending northerly to the Pole and the boundary on the east as the 60th meridian of west longitude, extending from just east of Ellesmere island northerly to the Pole. This was the first map that clearly indicated the extent of Canadian jurisdiction. Subsequent maps issued by the Dominion Government likewise show these regions as being part of Canada.

Subsequent to the transfer of the northern islands to Canada by the United Kingdom, the Canadian Government manifested its interest by sponsoring and sending into this northern section a number of expeditions for the purpose of further exploration and scientific investigation—1884, S.S. *Neptune*; 1885 and 1886, S.S. *Alert*; 1897, S.S. *Diana*; 1903-05, S.S. *Neptune*; 1906-07, C.G.S. *Arctic*; 1908-09, C.G.S. *Arctic*; 1910, C.G.S. *Arctic*. (See the official publications, *Southern Baffin Island*, 1930, and *Canada's Eastern Arctic*, 1934.)

The above expeditions entered the northern archipelago from the east and carried on scientific investigations and exploration on practically all of the known islands. From 1913 to 1918, extensive studies were made in the Western Arctic. (Report of the Canadian Arctic Expedition, 1913-18.)

The information obtained by these expeditions clearly indicated to the Canadian Government that it was necessary for Canada to establish police supervision and postal conveniences. As a result of this decision police posts, customs offices and postal stations were established at Pond Inlet, Baffin island; Craig Harbour, Ellesmere island; Pangnirtung, Baffin island; Dundas Harbour, Devon island; Bache Peninsula, Ellesmere island; Lake Harbour, Baffin island; Cambridge Bay, Victoria island, and a radio direction station on Resolution island. (*Canada's Eastern Arctic*, 1934.)

In 1922 the Canadian Government inaugurated a yearly patrol to Canada's northern islands. Each year this patrol has carried Government officials including administrative officers, doctors, scientists, and officers and constables of the Royal Canadian Mounted Police to maintain Canadian authority in these regions. Cana-

* Prepared under the direction of R. A. Gibson, Esq., Deputy Commissioner, Northwest Territories, Ottawa.

dian laws and regulations have been progressively introduced into this far-distant north until at the present time Canada has established and equipped administrative offices including Royal Canadian Mounted Police detachments, customs offices, postal stations, hospitals, scientific posts, wireless stations, and schools for the education and convenience of the inhabitants.

The Canadian Government has passed legislation making the laws applicable to the territorial districts on the mainland applicable also to the Arctic islands constituting the District of Franklin, and, through the medium of her police posts and yearly patrols, has assumed the obligation of seeing that the said laws and regulations are complied with by those living or entering into the northern regions.

Game preserves have been established for the protection of the wild life in order that an adequate supply may at all times be readily available to the natives. Laws have been passed requiring that any foreign national entering the Canadian archipelago must first obtain the permission of the Canadian Government authorities at Ottawa. It is also compulsory before such a permit is issued that the proposed entrants undertake to abide by the laws of Canada in force in these regions.

From year to year, as new conditions are brought to light, further steps are thus being taken by the Canadian Government to develop administrative services in this northern territory. The aeroplane is at present playing an important part in this respect, and, as necessity warrants, this method of transportation will be increased. The Royal Canadian Mounted Police are being equipped with a number of aeroplanes for use in the northern districts and the year 1938 finds administrative, medical, and police officers carried to points within the archipelago which heretofore have not been regularly visited.

PART III.—LEGISLATIVE AND EXECUTIVE AUTHORITIES.

Section 1.—Dominion Parliament and Ministry.

The Dominion Parliament is composed of the King, represented by the Governor General, the Senate, and the House of Commons. The Governor General is appointed by the King on the advice of the Government of Canada. Members of the Senate are appointed for life by the Governor General in Council and members of the House of Commons are elected by the people. As a result of the working out of the democratic principle, the part played by the King's Representative and the Upper Chamber of Parliament in the country's legislation has been, in Canada as in the United Kingdom, a steadily decreasing one, the chief responsibilities involved in legislation being assumed by the House of Commons.

In Subsections 3 and 4, pp. 98 to 108, a brief résumé of the history of parliamentary representation will be found. Attention may be drawn to the growth in the number of members of both the Senate and the House of Commons since Confederation and to the greatly increased unit of representation in the Lower House.

Subsection 1.—The Governor General of Canada.

The Governor General is appointed by the King as his representative in Canada, usually for a term of five years, with a salary fixed at £10,000 sterling per annum, which is a charge against the consolidated revenue of the country. The Governor General is bound by the terms of his commission and can exercise only such authority as is expressly entrusted to him. He acts under the advice of his Ministry, which

is responsible to Parliament, and, as the acting head of the Executive, summons, prorogues, and dissolves Parliament and assents to or reserves bills. In the discharge of these and other executive duties, he acts entirely by and with the advice of his Ministry (the Governor General in Council). The royal prerogative of mercy in capital cases, formerly exercised on the Governor General's own judgment and responsibility, is now exercised pursuant to the advice of the Ministry. The practice whereby the Governor General served as the medium of communication between the Canadian and the British Governments has been given up; since July 1, 1927, direct communication between His Majesty's Government in Canada and His Majesty's Government in Great Britain has been instituted.

A list of the Governors General from the time of Confederation, with the dates of their appointment and assumption of office, is given in Table 1.

1.—Governors General of Canada, 1867-1938.

Name.	Date of Appointment.	Date of Assumption of Office.
Viscount Monck, G.C.M.G.....	June 1, 1867	July 1, 1867
Lord Lisgar, G.C.M.G.....	Dec. 29, 1868	Feb. 2, 1869
The Earl of Dufferin, K.P., K.C.B., G.C.M.G.....	May 22, 1872	June 25, 1872
The Marquis of Lorne, K.T., G.C.M.G.....	Oct. 5, 1878	Nov. 25, 1878
The Marquis of Lansdowne, G.C.M.G.....	Aug. 18, 1883	Oct. 23, 1883
Lord Stanley of Preston, G.C.B.....	May 1, 1888	June 11, 1888
The Earl of Aberdeen, K.T., G.C.M.G.....	May 22, 1893	Sept. 18, 1893
The Earl of Minto, G.C.M.G.....	July 30, 1898	Nov. 12, 1898
Earl Grey, G.C.M.G.....	Sept. 26, 1904	Dec. 10, 1904
Field Marshall H.R.H. the Duke of Connaught, K.G.....	Mar. 21, 1911	Oct. 13, 1911
The Duke of Devonshire, K.G., G.C.M.G., G.C.V.O.....	Aug. 19, 1916	Nov. 11, 1916
General the Lord Byng of Vimy, G.C.B., G.C.M.G., M.V.O.....	Aug. 2, 1921	Aug. 11, 1921
Viscount Willingdon of Ratton, G.C.S.I., G.C.I.E., G.B.E.....	Aug. 5, 1926	Oct. 2, 1926
The Earl of Bessborough, G.C.M.G.....	Feb. 9, 1931	April 4, 1931
Lord Tweedsmuir of Elsfield, G.C.M.G., C.H.....	Aug. 10, 1935	Nov. 2, 1935

Subsection 2.—The Ministry.

A system of government based upon the British, by which a Cabinet or Ministry (composed of members of the House of Commons or the Senate), responsible to Parliament, holds office while it enjoys the confidence of the people's representatives, is found in Canada. The Cabinet is actually a committee of the King's Privy Council for Canada. Without enlarging upon the features of the system, it may be sufficient to note that the Cabinet is responsible to the House of Commons, and, following established precedent, resigns office when it becomes evident that it no longer holds the confidence of the people's representatives. Members of the Cabinet are chosen by the Prime Minister; each generally assumes charge of one of the various Departments of Government, although one Minister may hold more than one portfolio at the same time, while other Ministers may be without portfolio.

The Prime Ministers since Confederation and the dates of their tenures of office, together with the members of the Sixteenth Ministry, are given in Table 2. The complete list of the members of the King's Privy Council for Canada, as at Mar. 1, 1938, is added as Table 3.

2.—Ministries since Confederation and Members of the Sixteenth Ministry.

NOTE.—A complete list of the members of Dominion Ministries from Confederation to 1913 appeared in the Year Book of 1912, pp. 422-429. A list of the members of Dominion Ministries from 1911 to 1921 appeared in the Year Book of 1920, pp. 651-653. A list of the members of the Twelfth and Thirteenth Ministries appeared on pp. 76-77 of the 1927-28 Year Book. Members of the Fourteenth Ministry are listed at p. 69 of the 1930 Year Book and members of the Fifteenth Ministry on p. 67 of the 1934-35 Year Book.

1. Rt. Hon. Sir John A. Macdonald, Prime Minister. From July 1, 1867, to Nov. 6, 1873.
2. Hon. Alexander Mackenzie, Prime Minister. From Nov. 7, 1873, to Oct. 16, 1878.
3. Rt. Hon. Sir John A. Macdonald, Prime Minister. From Oct. 17, 1878, to June 6, 1891.
4. Hon. Sir John J. C. Abbott, Prime Minister. From June 16, 1891, to Dec. 5, 1892.
5. Hon. Sir John S. D. Thompson, Prime Minister. From Dec. 5, 1892, to Dec. 12, 1894.
6. Hon. Sir Mackenzie Bowell, Prime Minister. From Dec. 21, 1894, to April 27, 1896.
7. Hon. Sir Charles Tupper, Prime Minister. From May 1, 1896, to July 8, 1896.
8. Rt. Hon. Sir Wilfrid Laurier, Prime Minister. From July 11, 1896, to Oct. 6, 1911.
9. Rt. Hon. Sir Robert L. Borden, Prime Minister. (Conservative Administration.) From Oct. 10, 1911, to Oct. 12, 1917.
10. Rt. Hon. Sir Robert L. Borden, Prime Minister. (Unionist Administration.) From Oct. 12, 1917, to July 10, 1920.
11. Rt. Hon. Arthur Meighen, Prime Minister. (Unionist—"National Liberal and Conservative Party".) From July 10, 1920, to Dec. 29, 1921.
12. Rt. Hon. William Lyon Mackenzie King, Prime Minister. From Dec. 29, 1921, to June 28, 1926.
13. Rt. Hon. Arthur Meighen, Prime Minister. From June 29, 1926, to Sept. 25, 1926.
14. Rt. Hon. William Lyon Mackenzie King, Prime Minister. From Sept. 25, 1926, to Aug. 6, 1930.
15. Rt. Hon. Richard Bedford Bennett, Prime Minister. From Aug. 7, 1930, to Oct. 23, 1935.
16. Rt. Hon. William Lyon Mackenzie King, Prime Minister. From Oct. 23, 1935.

SIXTEENTH DOMINION MINISTRY.

(According to precedence of the Ministers as at the formation of the Cabinet.)

Office.	Occupant.	Date of Appointment.
Prime Minister, President of the Privy Council, Secretary of State for External Affairs.....	Right Hon. W. L. Mackenzie King, C.M.G.....	Oct. 23, 1935
Member of the Administration and Minister without portfolio.....	Hon. Raoul Dandurand, K.C....	Oct. 23, 1935
Minister of Mines and Resources ¹	Hon. Thomas Alexander Crerar.	Oct. 23, 1935
Minister of Justice and Attorney General of Canada.....	Right Hon. Ernest Lapointe, K.C.....	Oct. 23, 1935
Minister of Public Works.....	Hon. Pierre Joseph Arthur Cardin, K.C.....	Oct. 23, 1935
Minister of Finance.....	Hon. Charles Avery Dunning...	Oct. 23, 1935
Postmaster General.....	Hon. John Campbell Elliott, K.C.....	Oct. 23, 1935
Minister of Trade and Commerce.....	Hon. William Daum Euler.....	Oct. 23, 1935
Secretary of State of Canada.....	Hon. Fernand Rinfret.....	Oct. 23, 1935
Minister of National Defence.....	Hon. Ian Alistair Mackenzie....	Oct. 23, 1935
Minister of Pensions and National Health.....	Hon. Charles Gavan Power, M.C., K.C.....	Oct. 23, 1935
Minister of National Revenue.....	Hon. James Lorimer Ilsley, K.C.	Oct. 23, 1935
Minister of Fisheries.....	Hon. Joseph Enoil Michaud, K.C.	Oct. 23, 1935
Minister of Labour.....	Hon. Norman McLeod Rogers....	Oct. 23, 1935
Minister of Transport ²	Hon. Clarence Decatur Howe...	Oct. 23, 1935
Minister of Agriculture.....	Hon. James Garfield Gardiner..	Oct. 28, 1935

¹ The Departments of Mines, Interior, Immigration and Colonization, and Indian Affairs were organized into the new Department of Mines and Resources on Dec. 1, 1936.

² The Department of Railways and Canals and the Department of Marine, together with the Civil Aviation Branch of the Department of National Defence were organized into the new Department of Transport on Nov. 2, 1936.

3.—Members of the King's Privy Council for the Dominion of Canada, According to Seniority Therein,¹ as at Mar. 1, 1938.

NOTE.—In this list the prefix Rt. Hon. indicates membership in the British Privy Council. Besides those mentioned in this list, the Rt. Hon. Sir Lyman P. Duff, G.C.M.G., Chief Justice of the Supreme Court, is a Canadian member of the British Privy Council.

Nome.	Date When Sworn In.	Name.	Date When Sworn In.
The Rt. Hon. Sir William Mulock.	July 13, 1896	The Hon. Charles Vincent Massey ⁷	Sept. 16, 1925
The Rt. Hon. Sir Charles Fitzpatrick ² .	Feb. 11, 1902	The Hon. Walter Edward Foster.	Sept. 26, 1925
The Hon. Sir A. B. Aylesworth.	Oct. 16, 1905	The Hon. Philippe Roy ⁶ .	Feb. 9, 1926
The Rt. Hon. George P. Graham.	Aug. 30, 1907	The Hon. Charles A. Dunning ³ .	Mar. 1, 1926
The Hon. R. Dandurand ⁴ .	Jan. 20, 1909	The Hon. John C. Elliott ³ .	Mar. 8, 1926
The Rt. Hon. W. L. Mackenzie King ⁴ .	June 2, 1909	The Hon. George Burpee Jones.	July 13, 1926
The Rt. Hon. Sir Thomas White.	Oct. 10, 1911	The Hon. Donald Sutherland.	July 13, 1926
The Hon. Wilfrid Bruno Nantel.	Oct. 10, 1911	The Hon. Raymond Ducharme	July 13, 1926
The Hon. Martin Burrell.	Oct. 16, 1911	Morand.	July 13, 1926
The Hon. Pierre Edouard Blondin.	Oct. 20, 1914	The Hon. John Alexander Macdonald.	July 13, 1926
The Rt. Hon. Arthur Meighen.	Oct. 2, 1915	The Hon. Eugène Paquet.	Aug. 23, 1926
The Hon. Esioff Léon Patenaude.	Oct. 6, 1915	The Hon. Guillaume André Fautaux.	Aug. 23, 1926
The Rt. Hon. William Morris Hughes.	Feb. 18, 1916	The Hon. Lucien Cannon.	Sept. 25, 1926
The Hon. Albert Sévigny.	Jan. 8, 1917	The Hon. William D. Euler ³ .	Sept. 25, 1926
The Hon. Charles Colquhoun	Oct. 3, 1917	The Hon. Fernand Rinfret ³ .	Sept. 25, 1926
The Hon. James Alexander Calder.	Oct. 12, 1917	The Hon. Peter Heenan.	Sept. 25, 1926
The Hon. Newton Wesley Rowell.	Oct. 12, 1917	The Hon. James Layton Ralston.	Oct. 8, 1926
The Hon. Sydney Chilton Mewburn.	Oct. 12, 1917	The Rt. Hon. Stanley Baldwin.	Aug. 2, 1927
The Hon. Thomas Alexander Crerar ³ .	Oct. 12, 1917	The Hon. Thomas Ahearn.	Jan. 16, 1928
The Hon. Alexander K. Maclean.	Oct. 23, 1917	The Hon. William Frederick Kay.	June 17, 1930
The Hon. Hugh Guthrie.	July 5, 1919	The Hon. Cyrus Macmillan.	June 17, 1930
The Hon. Sir Henry Lumley Drayton.	Aug. 2, 1919	The Hon. Ian Alistair Mackenzie ³ .	June 27, 1930
The Hon. Fleming Blanchard	July 13, 1920	The Hon. Arthur C. Hardy.	July 31, 1930
McCurdy.	July 13, 1920	The Hon. Arthur Sauvé.	Aug. 7, 1930
The Hon. Rupert W. Wigmore.	Feb. 22, 1921	The Hon. Murray MacLaren.	Aug. 7, 1930
The Hon. Edgar N. Rhodes.	Sept. 21, 1921	The Hon. Hugh Alexander Stewart.	Aug. 7, 1930
The Hon. John Babbington	Sept. 21, 1921	The Hon. Charles Hazlitt Cahan.	Aug. 7, 1930
Macaulay Baxter.	Sept. 22, 1921	The Hon. Donald Matheson	Aug. 7, 1930
The Hon. Henry Herbert Stevens.	Sept. 26, 1921	Sutherland.	Aug. 7, 1930
The Hon. Robert James Manion.	Sept. 26, 1921	The Hon. Alfred Duranleau.	Aug. 7, 1930
The Hon. James Robert Wilson.	Oct. 4, 1921	The Hon. Thomas Gerow Murphy.	Aug. 7, 1930
The Rt. Hon. Richard Bedford Bennett ⁵ .	Dec. 29, 1921	The Hon. Maurice Dupré.	Aug. 7, 1930
The Rt. Hon. Ernest Lapointe ³ .	Dec. 29, 1921	The Hon. Wesley Ashton Gordon.	Aug. 7, 1930
The Hon. Arthur Bliss Copp.	Dec. 29, 1921	The Hon. Robert Weir.	Aug. 8, 1930
The Hon. Charles Stewart.	Dec. 29, 1921	The Hon. G. Howard Ferguson.	Jan. 14, 1931
The Hon. William Richard Motherwell.	Dec. 29, 1921	The Hon. W. D. Herridge.	June 17, 1931
The Hon. James Murdock.	Dec. 29, 1921	The Hon. Robert Charles Matthews.	Dec. 6, 1933
The Hon. John Ewan Sinclair.	Dec. 30, 1921	The Hon. Richard Burpee Hanson.	Nov. 17, 1934
The Hon. James H. King.	Feb. 3, 1922	The Hon. Grote Stirling.	Nov. 17, 1934
The Hon. Edward Mortimer Macdonald.	April 12, 1923	The Hon. George Reginald Geary.	Aug. 14, 1935
The Hon. Edward James McMurray.	Nov. 14, 1923	The Hon. William Gordon Ernst.	Aug. 14, 1935
The Hon. Pierre Joseph Arthur Cardin ³ .	Jan. 30, 1924	The Hon. James Earl Lawson.	Aug. 14, 1935
The Hon. George Newcombe Gordon.	Sept. 7, 1925	The Hon. Samuel Gobeil.	Aug. 14, 1935
The Hon. Sir Herbert Marler ⁶ .	Sept. 9, 1925	The Hon. Lucien Henri Gendron.	Aug. 30, 1935
		The Hon. William Earl Rowe.	Aug. 30, 1935
		The Hon. Onésime Gagnon.	Aug. 30, 1935
		The Hon. Charles Gavan Power ⁴ .	Oct. 23, 1935
		The Hon. James Lorimer Isley ³ .	Oct. 23, 1935
		The Hon. Joseph Enoil Michaud ³ .	Oct. 23, 1935
		The Hon. Norman McLeod Rogers ³ .	Oct. 23, 1935
		The Hon. Clarence Decatur Howe ³ .	Oct. 23, 1935
		The Hon. James Garfield Gardiner ³ .	Nov. 4, 1935

¹ As in the case of Privy Councillors of the United Kingdom, members of His Majesty's Privy Council for Canada take rank *inter se* according to the dates of their being sworn in.

Chief Justice of Canada.

³ Ranks as a member of the Cabinet.

⁴ Ranks as the Prime Minister of Canada.

⁵ Ranks as the Leader of the Opposition.

⁶ Canadian Ministers abroad.

⁷ High Commissioner in Great Britain.

In Table 4 are given the dates of the opening and prorogation of the sessions of the various Dominion Parliaments from 1867 to 1938.

4.—Duration and Sessions of Dominion Parliaments, 1867-1938.

Order of Parliament.	Session.	Date of Opening.	Date of Prorogation.	Days of Session.	Date of Election, Writs Returnable, Dissolution and Length of Parliament. ¹
1st Parliament.....	1st	Nov. 1, 1867	May 22, 1868	18 ²	Aug., Sept., 1867. ³ Sept. 24, 1867. ⁴ July 8, 1872. ⁵ 4 y., 9 m., 15 d. ⁶
	2nd	April 15, 1869	June 22, 1869	69	
	3rd	Feb. 15, 1870	May 12, 1870	87	
	4th	Feb. 15, 1871	April 14, 1871	59	
	5th	April 11, 1872	June 14, 1872	65	
2nd Parliament.....	1st	Mar. 5, 1873	Aug. 13, 1873	81 ⁷	July, Aug., Sept., 1872. ³ Sept. 3, 1872. ⁴ Jan. 2, 1874. ⁵ 1 y., 4 m., 0 d. ⁶
	2nd	Oct. 23, 1873	Nov. 7, 1873	16	
3rd Parliament.....	1st	Mar. 26, 1874	May 26, 1874	62	Jan. 22, 1874. ³ Feb. 21, 1874. ⁴ Aug. 17, 1878. ⁵ 4 y., 5 m., 25 d. ⁶
	2nd	Feb. 4, 1875	April 8, 1875	64	
	3rd	Feb. 10, 1876	April 12, 1876	63	
	4th	Feb. 8, 1877	April 28, 1877	80	
	5th	Feb. 7, 1878	May 10, 1878	93	
4th Parliament.....	1st	Feb. 13, 1879	May 15, 1879	92	Sept. 17, 1878. ³ Nov. 21, 1878. ⁴ May 18, 1882. ⁵ 3 y., 5 m., 28 d. ⁶
	2nd	Feb. 12, 1880	May 7, 1880	86	
	3rd	Dec. 9, 1880	Mar. 21, 1881	103	
	4th	Feb. 9, 1882	May 17, 1882	98	
5th Parliament.....	1st	Feb. 8, 1883	May 25, 1883	107	June 20, 1882. ³ Aug. 7, 1882. ⁴ Jan. 15, 1887. ⁵ 4 y., 5 m., 10 d. ⁶
	2nd	Jan. 17, 1884	April 19, 1884	94	
	3rd	Jan. 29, 1885	July 20, 1885	173	
	4th	Feb. 25, 1886	June 2, 1886	98	
6th Parliament.....	1st	April 13, 1887	June 23, 1887	72	Feb. 22, 1887. ³ April 7, 1887. ⁴ Feb. 3, 1891. ⁵ 3 y., 9 m., 27 d. ⁶
	2nd	Feb. 23, 1888	May 22, 1888	90	
	3rd	Jan. 31, 1889	May 2, 1889	92	
	4th	Jan. 16, 1890	May 16, 1890	121	
7th Parliament.....	1st	April 29, 1891	Sept. 30, 1891	155	Mar. 5, 1891. ³ April 25, 1891. ⁴ April 24, 1896. ⁵ 5 y., 0 m., 0 d. ⁶
	2nd	Feb. 25, 1892	July 9, 1892	136	
	3rd	Jan. 26, 1893	April 1, 1893	66	
	4th	Mar. 15, 1894	July 23, 1894	131	
	5th	April 18, 1895	July 22, 1895	96	
	6th	Jan. 2, 1896	April 23, 1896	111	
8th Parliament.....	1st	Aug. 19, 1896	Oct. 5, 1896	48	June 23, 1896. ³ July 13, 1896. ⁴ Oct. 9, 1900. ⁵ 4 y., 2 m., 26 d. ⁶
	2nd	Mar. 25, 1897	June 29, 1897	97	
	3rd	Feb. 3, 1898	June 13, 1898	131	
	4th	Mar. 16, 1899	Aug. 11, 1899	149	
	5th	Feb. 1, 1900	July 18, 1900	168	
9th Parliament.....	1st	Feb. 6, 1901	May 23, 1901	107	Nov. 7, 1900. ³ Dec. 5, 1900. ⁴ Sept. 29, 1904. ⁵ 3 y., 9 m., 26 d. ⁶
	2nd	Feb. 13, 1902	May 15, 1902	90	
	3rd	Mar. 12, 1903	Oct. 24, 1903	227	
	4th	Mar. 10, 1904	Aug. 10, 1904	154	
10th Parliament.....	1st	Jan. 11, 1905	July 20, 1905	191	Nov. 3, 1904. ³ Dec. 15, 1904. ⁴ Sept. 17, 1908. ⁵ 3 y., 9 m., 4 d. ⁶
	2nd	Mar. 8, 1906	July 13, 1906	128	
	3rd	Nov. 22, 1906	April 27, 1907	157	
	4th	Nov. 28, 1907	July 20, 1908	236	
11th Parliament.....	1st	Jan. 20, 1909	May 19, 1909	120	Oct. 26, 1908. ³ Dec. 3, 1908. ⁴ July 29, 1911. ⁵ 2 y., 7 m., 28 d. ⁶
	2nd	Nov. 11, 1909	May 4, 1910	175	
	3rd	Nov. 17, 1910	July 29, 1911	196 ⁸	
12th Parliament.....	1st	Nov. 15, 1911	April 1, 1912	139	Sept. 21, 1911. ³ Oct. 7, 1911. ⁴ Oct. 6, 1917. ⁵ 6 y., 0 m., 0 d. ⁶
	2nd	Nov. 21, 1912	June 6, 1913	173 ⁹	
	3rd	Jan. 15, 1914	June 12, 1914	148	
	4th	Aug. 18, 1914	Aug. 22, 1914	5	
	5th	Feb. 4, 1915	April 15, 1915	71	
	6th	Jan. 12, 1916	May 18, 1916	127	
	7th	Jan. 18, 1917	Sept. 20, 1917	207 ¹⁰	
13th Parliament.....	1st	Mar. 18, 1918	May 24, 1918	68	Dec. 17, 1917. ³ Feb. 27, 1918. ⁴ Oct. 4, 1921. ⁵ 3 y., 7 m., 6 d. ⁶
	2nd	Feb. 20, 1919	July 7, 1919	138	
	3rd	Sept. 1, 1919	Nov. 10, 1919	71	
	4th	Feb. 26, 1920	July 1, 1920	127	
	5th	Feb. 14, 1921	June 4, 1921	111	

¹ The ordinary legal limit of duration for each Parliament is five years.

² Adjourned from Dec.

21, 1867, to Mar. 12, 1868, to allow the local legislatures to meet.

³ Period of general elections.

⁴ Writs returnable.

⁵ Dissolution of Parliament.

⁶ Duration of Parliament in years, months, and days. The life of a Parliament is counted from the date of return of election writs to the date of dissolution, both days inclusive.

⁷ Adjourned May 23 until Aug. 13.

⁸ Not including days (59) of adjournment from May 19 to July 13.

⁹ Not including days (25) of adjournment from Dec. 19, 1912, to Jan. 14, 1913.

¹⁰ Not including days (39) of adjournment from Feb. 7 to Mar. 19, 1917.

4.—Duration and Sessions of Dominion Parliaments, 1867-1938—concluded.

Order of Parliament.	Session.	Date of Opening.	Date of Prorogation.	Days of Session.	Date of Election, Writs Returnable, Dissolution and Length of Parliament. ¹
14th Parliament.....	1st	Mar. 8, 1922	June 28, 1922	113	Dec. 6, 1921. ²
	2nd	Jan. 31, 1923	June 30, 1923	151	Jan. 14, 1922. ³
	3rd	Feb. 28, 1924	July 19, 1924	143	Sept. 5, 1925. ⁴
	4th	Feb. 5, 1925	June 27, 1925	143	3 y., 7 m., 26 d. ⁵
15th Parliament.....	1st	Jan. 7, 1926	July 2, 1926	177 ⁶	Oct. 29, 1925. ² Dec. 7, 1925. ³ July 2, 1926. ⁴ 6 m., 26 d. ⁵
16th Parliament.....	1st	Dec. 9, 1926	April 14, 1927	73 ⁷	Sept. 14, 1926. ²
	2nd	Jan. 26, 1928	June 11, 1928	138	Nov. 2, 1926. ³
	3rd	Feb. 7, 1929	June 14, 1929	128	May 30, 1930. ⁴
	4th	Feb. 20, 1930	May 30, 1930	100	3 y., 7 m., 0 d. ⁵
17th Parliament.....	1st	Sept. 8, 1930	Sept. 22, 1930	15	July 28, 1930. ² Aug. 18, 1930. ³ Aug. 15, 1935. ⁴ 4 y., 11 m., 29 d. ⁵
	2nd	Mar. 12, 1931	Aug. 3, 1931	145	
	3rd	Feb. 4, 1932	May 26, 1932	113	
	4th	Oct. 6, 1932	May 27, 1933	169 ⁸	
	5th	Jan. 25, 1934	July 8, 1934	160	
	6th	Jan. 17, 1935	July 8, 1935	170	
18th Parliament.....	1st	Feb. 6, 1936	June 23, 1936	139	Oct. 14, 1935. ²
	2nd	Jan. 14, 1937	April 10, 1937	87	Nov. 9, 1935. ³
	3rd	Jan. 27, 1938		9	

¹ The ordinary legal limit of duration for each Parliament is five years. ² Period of general elections. ³ Writs returnable. ⁴ Dissolution of Parliament. ⁵ Duration of Parliament in years, months, and days. The life of a Parliament is counted from the date of return of election writs to the date of dissolution, both days inclusive. ⁶ Including days (13) of adjournment from Mar. 3 to Mar. 15. ⁷ Not including days (54) of adjournment from Dec. 15 to Feb. 8. ⁸ Not including days (65) of adjournment from Nov. 25 to Jan. 30. ⁹ Not available at the time of going to press.

Subsection 3.—The Senate.

The British North America Act, 1867, provides in Sections 21 and 22 that "the Senate shall consist of seventy-two members, who shall be styled Senators.* In relation to the constitution of the Senate, Canada shall be deemed to consist of three divisions—(1) Ontario; (2) Quebec; (3) The Maritime Provinces—Nova Scotia, and New Brunswick; which three divisions shall be equally represented in the Senate as follows: Ontario by twenty-four senators; Quebec by twenty-four senators; and the Maritime Provinces by twenty-four senators, twelve thereof representing New Brunswick and twelve thereof representing Nova Scotia. In the case of Quebec, each of the twenty-four senators representing the province shall be appointed for one of the electoral divisions of Lower Canada, specified in Schedule A to Chapter I of the Consolidated Statutes of Canada". Further, under Section 147 of the same Act, it is provided that "in the case of the admission to Confederation of Newfoundland or Prince Edward Island, . . . each shall be entitled to a representation in the Senate of four members. Prince Edward Island, when admitted, shall be deemed to be comprised in the third of the three divisions into which Canada is divided by this Act" and on its admission "the representation of Nova Scotia and New Brunswick shall, as vacancies occur, be reduced from twelve to ten members, respectively". In case of the admission of Newfoundland, the normal membership of the Senate of 72 members was to be increased to 76, while the maximum number of 78 (Sec. 28) was to be 82, Sec. 26 containing a provision for the appointment of three or six additional members in certain cases, to represent equally the three divisions of Canada.

* A senator's sessional indemnity is \$4,000.

By 33 Vict., c. 3, an Act to establish and provide for the government of the province of Manitoba, passed in 1870, the newly formed province was given representation of two members in the Senate, provision being made at the same time for increases in representation to three and four on increases of population, according to the decennial census, to 50,000 and 75,000, respectively. In the following year, British Columbia, on being admitted to the Union by an Imperial Order in Council of May 16, 1871, was given representation by three senators. Two years later, when Prince Edward Island was admitted to Confederation by an Imperial Order in Council of June 26, 1873, it was granted representation in the Senate of four members under the terms of the British North America Act, as cited above. Thus, in 1873, the seven provinces—Ontario, Quebec, Nova Scotia, New Brunswick, Manitoba, British Columbia, and Prince Edward Island—were represented by a total of 77 members in the Senate, their individual representation at the time being 24, 24, 10, 10, 2, 3, and 4 members, respectively.

In 1882, following the Census of 1881 and an increase of population in Manitoba to 62,260 persons, the representation of this province was increased to three members under authority of the Manitoba Act, 1870. Later, by 50-51 Vict., c. 38, an Act of 1887, the representation of the Northwest Territories in the Senate was fixed at two members. A subsequent increase resulted from the growth of population in Manitoba to 152,506, as shown by the Census of 1891, the province being granted a fourth senator under the terms of the Manitoba Act of 1870. An Act passed in the session of 1903 (3 Edw. VII, c. 42) provided for an increase in the representation of the Northwest Territories from two to four members, bringing the total representation at this date to 83 members.

On the establishment of the provinces of Alberta and Saskatchewan out of the former Northwest Territories in 1905, under 4-5 Edw. VII, cc. 3 and 42, provision was made for their representation in the Senate by 4 members each, which might be increased by Parliament to 6 on the completion of the next decennial census. This change in representation brought the membership of the Upper Chamber to a total of 87.

In 1915, by an amendment to the British North America Act (5-6 Geo. V, c. 45), an important change was made with regard to the constitution of the Senate. The number of divisions provided for by Section 22 of the original Act was increased from three to four, the fourth comprising the four western provinces of Manitoba, Saskatchewan, Alberta, and British Columbia. Each of these provinces was to be represented by 6 members under the Act, the division being thus represented by 24 members and placed on an equality with the others with respect to membership. A corresponding change was made in the number of additional senators provided for by the original British North America Act by substituting increases of four or eight members for the three or six cited in Section 26 of the Act of 1867. Normal representation, therefore, is at present fixed at 96, which number may be increased if necessary to 100 or to a maximum of 104.

The entry of Newfoundland to the Union is still provided for by the above Act, Subsection 6 of Section 1 of which sets out its representation as six members instead of the four granted by the Act of 1867. If Newfoundland were admitted to the Dominion, the normal number of senators would be 102 with a maximum of 110.

In Table 5 the growth of membership in the Senate is shown by divisions and provinces from 1867 to 1915, since when no change has taken place. The names and addresses of the senators from each province are given, as at Mar. 15, 1938, in Table 6.

5.—Growth of Representation in the Senate, 1867-1938.

Province.	1867.	1870.	1871.	1873.	1882.	1887.	1892.	1903.	1905.	1915-1938.
(1) Ontario.....	24	24	24	24	24	24	24	24	24	24
(2) Quebec.....	24	24	24	24	24	24	24	24	24	24
(3) Maritime Provinces.....	24	24	24	24	24	24	24	24	24	24
Nova Scotia.....	12	12	12	10	10	10	10	10	10	10
New Brunswick.....	12	12	12	10	10	10	10	10	10	10
Prince Edward Island.....	-	-	-	4	4	4	4	4	4	4
(4) Western Provinces.....	-	2	5	5	6	8	9	11	15	24
Manitoba.....	-	2	2	2	3	3	4	4	4	6
British Columbia.....	-	-	3	3	3	3	3	3	3	6
Saskatchewan.....	-	-	-	-	-	2	2	4	4	6
Alberta.....	-	-	-	-	-	-	-	-	4	6
Totals.....	72	74	77	77	78	80	81	83	87	96

6.—Representation in the Senate of Canada, by Provinces, as at Mar. 15, 1938.

Name of Senator.	Post Office Address.	Name of Senator.	Post Office Address.
Prince Edward Island— (4 senators).		Quebec—concluded.	
Hughes, James J.....	Souris.	Morand, L.....	Quebec.
MacArthur, Creelman.....	Summerside.	Sauvé, Arthur, P.C.....	St. Eustache.
Sinclair, John E., P.C.....	Emerald.	Paquet, Eugène, P.C.....	Bonaventure.
Macdonald, John A., P.C.....	Cardigan.	Bourgeois, Charles.....	Three Rivers.
		Hugessen, A. K.....	Montreal.
Nova Scotia— (10 senators).		Ontario— (24 senators).	
McLennan, John S.....	Sydney.	Gordon, George.....	North Bay.
Tanner, C. E.....	Pictou.	Smith, E. D.....	Winona.
Logan, H. J.....	Parrsboro.	Donnelly, J. J.....	Pinkerton.
Dennis, W. H.....	Halifax.	Lynch-Staanton, G.....	Hamilton.
MacDonald, J. A.....	St. Peters.	White, G. V.....	Pembroke.
Rhodes, Edgar N., P.C.....	Amherst.	Macdonell, A. H., C.M.G.....	Toronto.
Cantley, Thomas.....	New Glasgow.	Hardy, A. C., P.C.....	Brockville.
Quinn, Felix P.....	Bedford.	Aylesworth, Sir A. B., P.C.....	Toronto.
Robicheau, John L. P.....	Maxwellton.	Graham, Rt. Hon. George P., P.C.....	Brockville.
Duff, William.....	Lunenburg.	McGuire, William H.....	Toronto.
New Brunswick— (10 senators)		Spence, James H.....	Toronto.
Bourque, T. J.....	Richibucto.	Little, Edgar S.....	London.
McDonald, J. A.....	Shediac.	Lacasse, Gustave.....	Tecumseh.
Black, Frank B.....	Sackville.	Horsley, H. H.....	Cressy.
Turgeon, Onésiphore.....	Bathurst.	Wilson, Cairine R.....	Ottawa.
Robinson, C. W.....	Moncton.	Murdock, J., P.C.....	Ottawa.
Copp, A. B., P.C.....	Sackville.	Meighen, Rt. Hon. A., P.C.....	Toronto.
Foster, W. E., P.C. (Speaker)	Saint John.	Fripp, A. E.....	Ottawa.
Jones, George B., P.C.....	Apohaqui.	Côté, L.....	Ottawa.
Léger, Antoine J.....	Moncton.	Sutherland, Donald, P.C.....	Ingersoll.
Smith, Benjamin F.....	East Florenceville.	Fallis, Iva C.....	Peterborough, R.R. No. 3.
Quebec— (24 senators—two vacancies).		O'Connor, Frank P.....	Toronto.
Dandurand, R., P.C.....	Montreal.	Lambert, Norman P.....	Ottawa.
Casgrain, J. P. B.....	Montreal.	Marshall, Duncan M.....	Toronto.
Wilson, J. M.....	Montreal.	Manitoba— (6 senators—one vacancy).	
Pope, Rufus H.....	Cookshire.	Sharpe, W. H.....	Manitou.
Beaubien, C. P.....	Montreal.	McMeans, L.....	Winnipeg.
L'Espérance, D. O.....	Quebec.	Molloy, J. P.....	Morris.
Blondin, P. E., P.C.....	St. François du Lac.	Mullins, Henry A.....	Winnipeg.
Chapais, Sir Thomas.....	Quebec.	Haig, John T.....	Winnipeg.
Webster, L. C.....	Montreal.	Saskatchewan— (6 senators).	
Raymond, Donat.....	Montreal.	Laird, H. W.....	Regina.
Tobin, E. W.....	Bromptonville.	Calder, J. A., P.C.....	Regina.
Parent, G.....	Quebec.	Gillis, A. B.....	Whitewood.
Prévost, J.-E.....	St. Jérôme.	Marcotte, A.....	Ponteix.
Ballantyne, C. C.....	Montreal.	Horne, R. B.....	Blaine Lake.
Rainville, J. H.....	St. Lambert.	Aseltine, W. M.....	Rosetown.
Brown, A. J.....	Montreal.		
Fauteux, G. A., P.C.....	Outremont.		

6.—Representation in the Senate of Canada, by Provinces, as at Mar. 15, 1938—concluded

Name of Senator.	Post Office Address.	Name of Senator.	Post Office Address.
Alberta —(6 senators—one vacancy).		British Columbia —(6 senators).	
Michener, Edward.....	Calgary.	Barnard, G. H.....	Victoria.
Harmer, William J.....	Edmonton.	Taylor, J. D.....	New Westminster.
Griesbach, W. A., C.B.,		Green, R. F.....	Victoria.
C.M.G.....	Edmonton.	King, J. H., P.C.....	Victoria.
Buchanan, W. A.....	Lethbridge.	McRae, A. D., C.B.....	Vancouver.
Riley, Daniel E.....	High River.	Farris, J. W.....	Vancouver.

Subsection 4.—The House of Commons.

In Section 37 of the original British North America Act of 1867 (30 Vict., c. 3), it was provided that “The House of Commons shall . . . consist of one hundred and eighty-one members, of whom eighty-two shall be elected for Ontario, sixty-five for Quebec, nineteen for Nova Scotia and fifteen for New Brunswick”.* Further, under Section 51, it was enacted that after the completion of the Census of 1871 and of each subsequent decennial census, the representation of the four provinces should be readjusted by such authority, in such manner, and from such time, as the Parliament of Canada provided, subject to and according to the following rules:—

- “(1) Quebec shall have the fixed number of Sixty-five Members;
- “(2) There shall be assigned to each of the other Provinces such a Number of Members as will bear the same Proportion to the Number of its Population (ascertained at such Census) as the Number Sixty-five bears to the Number of the Population of Quebec (so ascertained);
- “(3) In the Computation of the Number of Members for a Province a fractional Part not exceeding One Half of the whole Number requisite for entitling the Province to a Member shall be disregarded; but a fractional Part exceeding One Half of that Number shall be equivalent to the whole Number;
- “(4) On any such Re-adjustment the Number of Members for a Province shall not be reduced unless the Proportion which the Number of the Population of the Province bore to the Number of the aggregate Population of Canada at the then last preceding Re-adjustment of the Number of Members for the Province is ascertained at the then latest Census to be diminished by One Twentieth Part or upwards;
- “(5) Such Re-adjustment shall not take effect until the Termination of the then existing Parliament”.

Again, in Section 52, it was enacted that “the number of members of the House of Commons may be from time to time increased by the Parliament of Canada, provided the proportionate representation of the Provinces prescribed by this Act is not thereby disturbed”.

Later on, by the British North America Act of 1886 (49-50 Vict., c. 35), provision was made in Section 1 that “the Parliament of Canada may from time to time make provision for the representation in the Senate and House of Commons of Canada, or in either of them, of any territories which for the time being form part of the Dominion of Canada, but are not included in any province thereof”.

* The sessional indemnity of a member of the House of Commons is \$4,000.

Again in 1915, an amendment to the British North America Act (5-6 Geo. V, c. 45) was passed by the Imperial Parliament, providing that "notwithstanding anything in the said Act, a province shall always be entitled to a number of members in the House of Commons not less than the number of senators representing such province".

Readjustments in Representation.—As set out in the above-mentioned provisions of the British North America Act, the representation in the House of Commons has been readjusted following each of the seven decennial censuses since taken, also as a result of the admission of Manitoba, British Columbia, and Prince Edward Island to Confederation and the creation of portions of the Northwest into Saskatchewan, Alberta, and Yukon. At pp. 74-77 of the 1934-35 Year Book, the problems of redistribution are dealt with in detail, especially those arising out of the 1931 Census. Summarized accounts were also carried in later Year Books down to 1937 (see pp. 79 and 80 of the 1937 Year Book).

The number of representatives of each province elected at each of the eighteen general elections since Confederation is given in Table 7.

7.—Representation in the House of Commons as at Dominion General Elections, 1867-1935.

Province.	1867.	1872.	1874.	1878.	1882.	1887.	1891.	1896.	1900.	1904.	1908.	1911.	1917.	1921.	1925. ¹	1935.
Ont.....	82	88	88	88	92	92	92	92	92	86	86	86	82	82	82	82
Que.....	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
N.S.....	19	21	21	21	21	21	21	20	20	18	18	18	16	16	14	12
N.B.....	15	16	16	16	16	16	16	14	14	13	13	13	11	11	11	10
Man.....	—	4	4	4	5	5	5	7	7	10	10	10	15	15	17	17
B.C.....	—	6	6	6	6	6	6	6	6	7	7	7	13	13	14	16
P.E.I.....	—	—	6	6	6	6	6	5	5	4	4	4	4	4	4	4
Sask.....	—	—	—	—	—	4	4	4	4	10	10	10	16	16	21	21
Alta.....	—	—	—	—	—		—	—	—		7	7	12	12	16	17
Yukon.....	—	—	—	—	—		—	—	—	1	1	1	1	1	1	1
Totals..	181	200	206	206	211	215	215	213	213	214	221	221	235	235	245	245

¹ The representation at the general elections of 1926 and 1930 was the same as in 1925.

The Unit of Representation.—While the number of members of the House of Commons has been growing fairly steadily since Confederation, the unit of representation—one-sixty-fifth of the population of Quebec within its 1911 boundaries—has also been increased after each census in consequence of the growth of the population of Quebec. The units of representation, as determined by the decennial censuses taken since Confederation, are as follows: 1871, 18,331 persons; 1881, 20,908; 1891, 22,901; 1901, 25,368; 1911, 30,819; 1921, 36,283; 1931, 44,186, being one-sixty-fifth of the population of Quebec exclusive of Ungava.

Constituencies and Representatives in the Eighteenth Parliament.—

A complete list of the constituencies, with their 1931 populations, the voters on the list and votes polled at the general election of Oct. 14, 1935, together with the names and addresses of those then elected to the House of Commons of the eighteenth Parliament of Canada, will be found in Table 8. Changes occurring at subsequent by-elections to Mar. 15, 1938, are indicated in the footnotes.

8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	Party Affiliation.	P.O. Address.
Prince Edward Is.— (4 members).						
Kings.....	19,147	11,536	9,709	Grant, T. V.....	Lib.....	Montague, P.E.I.
Prince.....	31,500	18,281	14,355	MacLean, A. E.....	Lib.....	Summerside, P. E.I.
Queens.....	37,391	23,465	37,576 ¹	{Larabee, J. J. ² {Sinclair, P. ⁷	Lib..... Lib.....	Eldon, P.E.I. Charlottetown, P.E.I.
Nova Scotia— (12 members).						
Antigonish-Guys- borough.....	25,516	15,029	11,581	Duff, W. ³	Lib.....	Lunenburg, N.S.
Cape Breton North- Victoria.....	31,615	17,562	13,965	Cameron, D. A. ⁴	Lib.....	Sydney, N.S.
Cape Breton South.....	65,198	34,967	28,472	Hartigan, D. J.....	Lib.....	New Waterford, N.S.
Colchester-Hants.....	44,444	27,233	21,064	Purdy, G. T.....	Lib.....	Truro, N.S.
Cumberland.....	36,366	22,239	17,270	Cochrane, K. J.....	Lib.....	Port Greville, N.S.
Digby-Annapolis-Kings.	50,859	32,079	23,119	Ilsley, Hon. J. L....	Lib.....	Ottawa, Ont.
Halifax.....	100,204	60,197	85,986 ¹	{Isnor, G. B..... {Finn, R. E.....	Lib..... Lib.....	Halifax, N.S. Halifax, N.S.
Inverness-Richmond....	35,768	21,207	16,929	McLennan, D.....	Lib.....	Inverness, N.S.
Pictou.....	39,018	23,197	19,240	MacCulloch, H. B..	Lib.....	New Glasgow, N.S.
Queens-Lunenburg.....	42,286	26,662	19,935	Kinley, J. J.....	Lib.....	Lunenburg, N.S.
Shelburne-Yarmouth- Clare.....	41,572	24,044	17,937	Pottier, V. J.....	Lib.....	Yarmouth, N.S.
New Brunswick— (10 members).						
Charlotte.....	21,337	13,574	10,622	Hill, B. M.....	Lib.....	St. Stephen, N.B.
Gloucester.....	41,914	20,342	15,993	Veniot, Hon. P. J ⁵ ..	Lib.....	Bathurst, N.B.
Kent.....	23,478	12,375	9,628	Robichaud, L.P.A..	Lib.....	Richibucto, N.B.
Northumberland.....	34,124	17,859	13,744	Barry, J. P.....	Lib.....	Chatham, N.B.
Restigouche-Mada- waska.....	54,386	26,405	17,858	Michaud, Hon. J. E.	Lib.....	Ottawa, Ont.
Royal.....	31,026	19,442	15,723	Brooks, A. J.....	Cons.....	Sussex, N.B.
St. John-Albert.....	69,292	41,202	31,948	Ryan, W. M. ⁶	Lib.....	Saint John, N.B.
Victoria-Carleton.....	35,703	20,284	15,831	Patterson, J. E. J..	Lib.....	Florenceville, N.B.
Westmorland.....	57,506	32,547	26,177	Emmerson, H. R....	Lib.....	Dorchester, N.B.
York-Sunbury.....	39,453	24,813	19,961	Clark, W. G.....	Lib.....	Fredericton, N.B.

¹ Each voter could vote for two members. ² Mr. Larabee having accepted an office of emolument under the Crown, Hon. Charles A. Dunning (Lib.) was elected by acclamation, Dec. 31, 1935. ³ Mr. W. Duff was appointed to the Senate on Feb. 28, 1936, and Mr. J. R. Kirk (Lib.) was elected by acclamation, Mar. 16, 1936. ⁴ Mr. Cameron died Sept. 4, 1937, and Mr. Matthew MacLean (Lib.) was elected by acclamation, Oct. 18, 1937. ⁵ Hon. Mr. Veniot died July 6, 1936, and Mr. C. J. Veniot (Lib.) was elected by acclamation, Aug. 17, 1936. ⁶ Mr. Ryan died Jan. 4, 1938, and Mr. Allan G. McAvity (Lib.) was elected by acclamation, Feb. 21, 1938. ⁷ Mr. Sinclair died Mar. 8, 1938.

8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	Party Affiliation.	P.O. Address.
Quebec— (65 members).						
Argenteuil.....	19,379	11,122	9,059	Perley, Rt. Hon. Sir George. ¹	Cons.....	Ottawa, Ont.
Beauce.....	51,614	24,341	17,363	Lacroix, E.....	Lib.....	Lacroix, P.Q.
Beauharnois-Laprairie.....	42,104	20,580	14,158	Raymond, M.....	Lib.....	Montreal, P.Q.
Bellechasse.....	27,480	13,394	9,313	Boulanger, O. L.....	Lib.....	Quebec, P.Q.
Berthier-Maskoningé.....	35,545	19,650	15,607	Ferron, J. E.....	Lib.....	Louiseville, P.Q.
Bonaventure.....	36,184	18,570	14,589	Marcil, Hon. C. ²	Lib.....	Ottawa, Ont.
Brome-Missisquoi.....	32,069	18,951	15,225	Gosselin, L.....	Lib.....	Notre Dame de Stanbridge, P.Q.
Chambly-Rouville.....	39,648	23,169	18,385	Dupuis, V.....	Lib.....	Laprairie, P.Q.
Champlain.....	37,526	18,860	15,598	Brunelle, H. E.....	Lib.....	Cap de la Madeleine, Centre, P.Q.
Chapleau.....	24,328	13,120	9,101	Blais, F., Sr.....	Ind.-Lib.....	Amos, P.Q.
Charlevoix-Saguenay.....	55,594	25,591	18,869	Casgrain, Hon. P. F.	Lib.....	Montreal, P.Q.
Châteauguay-Huntingdon.....	24,412	13,655	11,163	Black, D. E.....	Lib.....	Aubrey, P.Q.
Chicoutimi.....	55,724	25,558	20,623	Dubuc, J. E. A.....	Lib.....	Chicoutimi, P.Q.
Compton.....	31,858	16,430	13,886	Blanchette, J. A.....	Lib.....	Chartierville, P.Q.
Dorchester.....	27,156	12,775	10,588	Tremblay, L. D.....	Lib.....	St. Malachie, P.Q.
Drummond-Arthabaska.....	53,338	29,246	22,778	Girouard, W.....	Lib.....	Arthabaska, P.Q.
Gaspé.....	47,160	23,116	17,904	Brasnet, M.....	Lib.....	Percé, P.Q.
Hull.....	49,196	25,312	21,137	Fournier, A.....	Lib.....	Hull, P.Q.
Joliette-L'Assomption-Montcalm.....	56,444	30,473	18,008	Ferland, C. E.....	Lib.....	Joliette, P.Q.
Kamouraska.....	30,853	15,230	10,514	Bouchard, G.....	Lib.....	Ste. Anne de la Pocatière, P.Q.
Labelle.....	36,953	18,314	12,825	Lalonde, M.....	Lib.....	Mont Laurier, P.Q.
Lake St. John-Roberval.....	50,253	22,690	19,672	Sylvestre, A.....	Lib.....	Roberval, P.Q.
Laval-Two Mountains.....	26,224	13,828	11,649	Lacombe, L.....	Lib.....	Ste. Scholastique, P.Q.
Lévis.....	28,548	14,625	12,770	Dussault, J. E.....	Lib.....	Lévis, P.Q.
Lotbinière.....	38,546	20,377	15,249	Verville, J. A. ³	Lib.....	St. Flavien, P.Q.
Matapédia-Matane.....	39,977	18,624	14,433	Lapointe, A. J.....	Lib.....	Price, P.Q.
Mégantic-Frontenac.....	44,440	20,368	16,304	Roberge, E.....	Lib.....	Laurierville, P.Q.
Montmagny-L'Islet.....	30,869	15,636	11,843	Fafard, J. F.....	Lib.....	L'Islet, P.Q.
Nicolet-Yamaska.....	39,219	20,891	16,592	Dubois, L.....	Lib.....	Gentilly, P.Q.
Pontiac.....	43,045	28,139	18,465	McDonald, W. R.....	Ind.-Lib.....	Chapau, P.Q.
Portneuf.....	37,383	19,051	15,602	Cannon, Hon. L. ⁴	Lib.....	Quebec, P.Q.
Quebec East.....	58,145	30,309	25,413	Lapointe, Hon. E.....	Lib.....	Ottawa, Ont.
Quebec South.....	33,441	22,829	18,167	Power, Hon. C. G.....	Lib.....	Ottawa, Ont.
Quebec West and South.....	43,617	23,339	19,358	Parent, C.....	Lib.....	Quebec, P.Q.
Quebec-Montmorency.....	40,274	20,386	17,359	Lacroix, W.....	Lib.....	Quebec, P.Q.
Richelieu-Verchères.....	35,901	19,965	14,553	Cardin, Hon. P. J.	Lib.....	Ottawa, Ont.
Richmond-Wolfe.....	36,568	18,258	14,946	Mullins, J. P.....	Lib.....	Bromptonville, P.Q.
Rimouski.....	40,208	19,827	14,581	Fiset, Sir Eugène.....	Lib.....	Rimouski, P.Q.
St. Hyacinthe-Bagot.....	42,820	24,967	16,089	Fontaine, T. A.....	Lib.....	St. Hyacinthe, P.Q.
St. Johns-Iberville.....	32,259	18,302	10,910	Rhéaume, M.....	Lib.....	St. Jean, P.Q.
Napierville.....	45,450	21,943	16,941	Crête, J. A.....	Lib.....	Grand'mère, P.Q.
St. Maurice-Laféche.....	28,262	16,499	13,595	Leclerc, J. H.....	Lib.....	Granby, P.Q.
Shefford.....	37,386	21,980	18,085	Howard, C. B.....	Lib.....	Sherbrooke, P.Q.
Sherbrooke.....	25,118	14,493	11,765	Davidson, R. G.....	Lib.....	North Hatley, P.Q.
Stanstead.....	42,679	20,720	15,347	Pouliot, J. F.....	Lib.....	Rivière du Loup, P.Q.
Témiscouata.....	38,940	20,748	15,389	Parent, L. E.....	Lib.....	Ste. Agathe, P.Q.
Terrebonne.....	44,223	25,547	20,587	Gariépy, W.....	Ind.-Lib.....	Trois Rivières, P.Q.
Three Rivers.....	21,114	11,643	8,848	Thauvette, J.....	Lib.....	Vaudreuil, P.Q.
Vaudreuil-Soulanges.....	27,107	14,284	10,783	Perras, F. W. ⁵	Lib.....	Gracefield, P.Q.
Wright.....						

¹ Rt. Hon. Sir George Perley died Jan. 4, 1938, and Mr. Georges Heon (Con.) was elected Feb. 28, 1938.

² Hon. Charles Marcil died Jan. 22, 1937, and Mr. P. E. Côté (Lib.) was elected Mar. 22, 1937.

³ Mr. Verville died Nov. 20, 1937, and Mr. Joseph N. Francoeur (Lib.) was elected Dec. 27, 1937.

⁴ Hon. Mr. Cannon having accepted an office of emolument under the Crown, Dr. P. Gauthier (Lib.) was elected by acclamation, Jan. 29, 1936.

⁵ Mr. Perras died June 28, 1936, and Mr. E. Leduc (Lib.) was elected by acclamation, Aug. 5, 1936.

8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.

Province and Electoral District.	Popula- tion, 1931.	Voters on List.	Votes Polled.	Name of Member.	Party Affili- ation.	P.O. Address.
Quebec—concluded.						
<i>Montreal Island—</i>						
Cartier.....	61,280	41,373	21,389	Jacobs, S. W.....	Lib.....	Westmount, P.Q.
Hochelaga.....	78,353	44,009	30,685	St.-Père, E. C.....	Lib.....	Montreal, P.Q.
Jacques-Cartier.....	42,671	20,957	16,120	Mallette, V.....	Lib.....	Pte. Claire, P.Q.
Laurier.....	68,784	41,228	28,134	Bertrand, E.....	Lib.....	Westmount, P.Q.
Maisonneuve- Rosemount.....	64,845	35,419	26,148	Fournier, S.....	Lib.....	Montreal, P.Q.
Mercier.....	66,651	34,906	24,706	Jean, J.....	Lib.....	Montreal, P.Q.
Mount Royal.....	65,012	46,133	33,224	Walsh, W. A.....	Cons.....	Outremont, P.Q.
Outremont.....	46,136	28,805	20,616	Vien, T.....	Lib.....	Montreal, P.Q.
St. Ann.....	38,673	20,505	15,803	Hushion, W. J.....	Lib.....	Westmount, P.Q.
St. Antoine- Westmount.....	50,009	35,330	22,322	White, R. S.....	Cons.....	Westmount, P.Q.
St. Denis.....	76,930	44,945	31,049	Denis, A.....	Lib.....	Montreal, P.Q.
St. Henry.....	78,127	42,550	30,096	Mercier, P. I.....	Lib.....	Montreal, P.Q.
St. James.....	89,374	54,768	37,672	Rinfret, Hon. F.....	Lib.....	Ottawa, Ont.
St. Lawrence- St. George.....	40,213	22,549	14,329	Cahan, Hon. C. H.....	Cons.....	Montreal, P.Q.
St. Mary.....	77,472	46,473	32,951	Deslauriers, H.....	Lib.....	Montreal, P.Q.
Verdun.....	63,144	36,298	25,347	Wernenlinger, E. J.....	Cons.....	Verdun, P.Q.
Ontario—						
<i>(82 members).</i>						
Algoma East.....	27,925	14,472	10,627	Farquhar, T.....	Lib.....	Mindemoya, Ont.
Algoma West.....	35,618	20,098	14,949	Hamilton, H. S.....	Lib.....	Sault Ste. Marie, Ont.
Brant.....	21,202	12,257	9,725	Wood, G. E.....	Lib.....	Cainsville, Ont.
Brantford City.....	32,274	20,969	16,897	Macdonald, W. R.....	Lib.....	Brantford, Ont.
Bruce.....	29,842	18,899	14,992	Tomlinson, W. R.....	Lib.....	Port Elgin, Ont.
Carleton.....	31,305	19,603	16,311	Hyndman, A. B.....	Cons.....	Carp, Ont.
Cochrane.....	58,284	34,225	19,976	Bradette, J. A.....	Lib.-Lab.....	Cochrane, Ont.
Dufferin-Simcoe.....	27,394	20,612	15,654	Rowe, Hon. W. E. ²	Cons.....	Newton Robinson, Ont.
Durham.....	25,782	17,084	13,964	Rickard, W. F.....	Lib.....	Newcastle, Ont.
Elgin.....	43,436	29,376	22,694	Mills, W. H.....	Lib.....	Sparta, Ont.
Essex East.....	51,718	26,223	19,467	Martin, P.....	Lib.....	Walkerville, Ont.
Essex South.....	31,970	18,088	13,144	Clark, S. M.....	Lib.....	Harrow, Ont.
Essex West.....	75,350	41,726	26,630	McLarty, N. A.....	Lib.....	Windsor, Ont.
Fort William.....	34,656	17,352	13,895	McIvor, D.....	Lib.....	Fort William, Ont.
Frontenac-Addington.....	26,455	17,398	14,512	Campbell, C. A. ³	Lib.....	Northbrook, Ont.
Glengarry.....	18,666	11,073	8,858	MacRae, J. D.....	Lib.....	Apple Hill, Ont.
Greenville-Dundas.....	32,425	22,044	17,199	Casselman, A. C.....	Cons.....	Prescott, Ont.
Grey-Bruce.....	35,736	23,384	18,110	Macphail, A. C. (Miss).....	U.F.O.- Lab.....	Ceylon, Ont.
Grey North.....	35,407	23,096	17,908	Telford, W. P.....	Lib.....	Owen Sound, Ont.
Haldimand.....	21,428	13,927	11,388	Senn, M. C.....	Cons.....	Caledonia, Ont.
Halton.....	26,558	17,539	13,262	Cleaver, H.....	Lib.....	Burlington, Ont.
Hamilton East.....	66,771	40,725	28,421	Brown, A. A.....	Cons.....	Hamilton, Ont.
Hamilton West.....	56,305	33,926	23,961	Wilton, H. E. ⁴	Cons.....	Hamilton, Ont.
Hastings-Peterborough.....	27,160	16,956	12,910	Ferguson, R. S.....	Lib.....	Norwood, Ont.
Hastings South.....	39,327	25,122	20,603	Cameron, C. A.....	Lib.....	Belleville, Ont.
Huron North.....	26,095	17,897	14,067	Deachman, R. J.....	Lib.....	Wingham, Ont.
Huron-Perth.....	22,661	14,672	10,847	Golding, W. H.....	Lib.....	Seaforth, Ont.
Kenora-Rainy River.....	39,834	21,892	14,656	McKinnon, H. B.....	Lib.....	Kenora, Ont.
Kent.....	50,994	29,576	18,964	Rutherford, J. W.....	Lib.....	Chatham, Ont.
Kingston City.....	26,180	17,022	13,367	Rogers, Hon. N. M.....	Lib.....	Ottawa, Ont.
Lambton-Kent.....	34,686	20,953	15,246	McKenzie, H. A.....	Lib.....	Watford, Ont.
Lambton West.....	32,601	20,912	15,157	Gray, R. W.....	Lib.....	Sarnia, Ont.
Lanark.....	32,856	21,478	17,763	Thompson, T. A.....	Cons.....	Almonte, Ont.
Leeds.....	35,157	22,975	19,229	Stewart, Hon. H. A.....	Cons.....	Brockville, Ont.
Lincoln.....	54,199	34,429	26,425	Lockhart, N. J. M.....	Cons.....	St. Catharines, Ont.
London.....	59,821	41,777	30,522	Betts, F. C.....	Cons.....	London, Ont.
Middlesex East.....	34,788	22,073	16,012	Ross, D. G.....	Lib.....	Lucan, Ont.

¹ Mr. Mercier having accepted an office of emolument under the Crown, Mr. Joseph A. Bonnier (Lib.) was elected Jan. 17, 1938. ² Hon. Mr. Rowe resigned Sept. 28, 1937, and was re-elected by acclamation Nov. 8, 1937. ³ Mr. Campbell resigned Aug. 11, 1937, and Mr. Angus N. McCallum (Lib.) was elected by acclamation Nov. 1, 1937. ⁴ Mr. Wilton died Jan. 31, 1937, and Mr. J. A. Marsh (Lib.) was elected Mar. 22, 1937.

8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	Party Affiliation.	P.O. Address.
Ontario—concluded.						
Middlesex West.....	23,632	15,269	11,719	Elliott, Hon. J. C.....	Lib.....	Ottawa, Ont.
Muskoka-Ontario.....	35,513	23,038	17,428	Furniss, S. J.....	Lib.....	Brechin, Ont.
Nipissing.....	88,597	47,661	33,649	Hurtubise, J. R.....	Lib.....	Sudbury, Ont.
Norfolk.....	31,359	19,842	14,521	Taylor, W. H.....	Lib.....	Scotland, Ont.
Northumberland.....	30,727	20,291	16,583	Fraser, W. A.....	Lib.....	Trenton, Ont.
Ontario.....	45,138	27,291	20,947	Moore, W. H.....	Lib.....	Dunbarton, Ont.
Ottawa East.....	51,667	33,259	26,406	Chevrier, E. R. E. ¹	Lib.....	Ottawa, Ont.
Ottawa West.....	78,656	55,759	44,671	Ahearn, T. F.....	Lib.....	Ottawa, Ont.
Oxford.....	47,825	30,825	24,119	Rennie, A. S.....	Lib.....	Tillsonburg, Ont.
Parry Sound.....	26,198	15,526	11,543	Slaght, A. G.....	Lib.....	Toronto, Ont.
Peel.....	28,156	19,203	16,045	Graydon, G.....	Cons.....	Brampton, Ont.
Perth.....	47,816	30,670	23,705	Sanderson, F. G.....	Lib.....	St. Mary's, Ont.
Peterborough West.....	37,042	23,566	19,022	Duffus, J. J.....	Lib.....	Peterborough, Ont.
Port Arthur.....	35,313	17,607	12,623	Howe, Hon. C. D.....	Lib.....	Ottawa, Ont.
Prescott.....	24,596	13,665	11,343	Bertrand, E. O.....	Lib.....	L'Orignal, Ont.
Prince Edward-Lennox.....	28,697	18,958	15,056	Tustin, G. J.....	Cons.....	Napanee, Ont.
Renfrew North.....	27,230	16,033	12,212	McKay, M. ²	Lib.....	Pembroke, Ont.
Renfrew South.....	26,986	15,800	11,960	McCann, J. J.....	Lib.....	Renfrew, Ont.
Russell.....	26,899	14,761	11,717	Goulet, A.....	Lib.....	Bourget, Ont.
Simcoe East.....	36,572	21,154	16,385	McLean, G. A.....	Lib.....	Orillia, Ont.
Simcoe North.....	29,224	18,849	14,608	McCuaig, D. F.....	Lib.....	Barrie, Ont.
Stormont.....	32,524	20,627	17,036	Chevrier, L.....	Lib.....	Cornwall, Ont.
Timiskaming.....	37,594	23,306	15,890	Little, W.....	Lib.....	Kirkland Lake, Ont.
Victoria.....	31,841	21,338	17,060	McNevin, B.....	Lib.....	Omamee, Ont.
Waterloo North.....	53,777	32,847	20,369	Euler, Hon. W. D.....	Lib.....	Ottawa, Ont.
Waterloo South.....	36,075	22,823	16,912	Edwards, A. M.....	Cons.....	Galt, Ont.
Welland.....	82,731	47,069	34,614	Damude, A. B.....	Lib.....	Fonthill, Ont.
Wellington North.....	27,677	16,319	12,876	Blair, J. K.....	Lib.....	Arthur, Ont.
Wellington South.....	35,856	22,614	16,987	Gladstone, R. W.....	Lib.....	Guelph, Ont.
Wentworth.....	66,943	40,840	30,488	Lennard, F. E., Jr.....	Cons.....	Dundas, Ont.
York East.....	66,194	46,215	33,703	McGregor, R. H.....	Cons.....	Toronto, Ont.
York North.....	43,323	26,146	20,000	Mulock, W. P.....	Lib.....	Toronto, Ont.
York South.....	60,350	42,998	31,237	Lawson, Hon. J. E.....	Cons.....	Toronto, Ont.
York West.....	55,881	34,491	25,930	Streight, J. E. L.....	Lib.....	Toronto, Ont.
City of Toronto—						
Broadview.....	57,523	39,804	28,053	Church, T. L.....	Cons.....	Toronto, Ont.
Danforth.....	41,824	29,034	21,135	Harris, J. H.....	Cons.....	Toronto, Ont.
Davenport.....	57,039	40,454	27,772	MacNicol, J. R.....	Cons.....	Toronto, Ont.
Eglinton.....	54,859	43,147	31,894	Baker, R. L.....	Cons.....	Toronto, Ont.
Greenwood.....	57,296	39,087	27,878	Messey, D.....	Cons.....	Toronto, Ont.
High Park.....	52,971	37,590	27,550	Anderson, A. J.....	Cons.....	Toronto, Ont.
Parkdale.....	51,398	34,956	24,408	Spence, D.....	Cons.....	Toronto, Ont.
Rosedale.....	53,081	36,755	23,793	Clarke, H. G.....	Cons.....	Toronto, Ont.
St. Paul's.....	62,283	45,113	26,821	Ross, D. G.....	Cons.....	Toronto, Ont.
Spadina.....	82,127	52,154	34,318	Factor, S.....	Lib.....	Toronto, Ont.
Trinity.....	60,806	39,642	26,973	Plaxton, H. J.....	Lib.....	Toronto, Ont.
Manitoba—						
(17 members).						
Brandon.....	40,483	22,262	17,059	Beaubier, D. W.....	Cons.....	Brandon, Man.
Churchill.....	32,133	13,863	9,084	Crerar, Hon. T. A.....	Lib.....	Ottawa, Ont.
Dauphin.....	37,703	20,501	15,405	Ward, W. J.....	Lib.....	Dauphin, Man.
Lisgar.....	30,547	14,212	10,282	Winkler, H. W.....	Lib.....	Morden, Man.
Macdonald.....	34,948	18,567	14,290	Weir, W. G.....	Lib-Prog.	Carman, Man.
Marquette.....	37,468	20,842	15,849	Glen, J. A.....	Lib.....	Russell, Man.
Neepawa.....	28,346	16,450	12,767	MacKenzie, F. D.....	Lib.....	Neepawa, Man.
Portage la Prairie.....	25,569	13,846	11,015	Leader, H.....	Lib.....	Portage la Prairie, Man.
Provencher.....	32,613	13,163	10,179	Beaubien, A. L.....	Lib.....	St. Jean Baptiste, Man.
St. Boniface.....	31,289	16,483	13,082	Howden, J. P.....	Lib.....	Norwood Grove, Man.
Selkirk.....	52,222	26,411	19,650	Thorsen, J. T.....	Lib-Prog.	Winnipeg, Man.
Souris.....	25,094	13,051	10,675	McDonald, G. W.....	Lib.....	Boissevain, Man.
Springfield.....	42,350	21,276	14,593	Turner, J. M.....	Lib.....	Winnipeg, Man.
Winnipeg North.....	74,762	37,761	29,321	Heaps, A. A.....	C.C.F.	Winnipeg, Man.

¹ Mr. Chevrier having accepted an office of emolument under the Crown, Mr. J. A. Pinard (Lib.) was elected, Oct. 26, 1936.

² Dr. McKay died Feb. 14, 1937, and Mr. R. M. Warren (Lib.) was elected April 5, 1937.

8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	Party Affiliation.	P.O. Address.
Manitoba—concluded.						
Winnipeg North Centre.	59,004	34,253	24,797	Woodsworth, J. S.	C.C.F.	Winnipeg, Man.
Winnipeg South.	51,518	31,260	25,085	Mutch, L. A.	Lib.	Winnipeg, Man.
Winnipeg South Centre.	64,090	41,373	31,456	Maybank, R.	Lib.	Fort Garry, Man.
Saskatchewan—						
(21 members).						
Assiniboia.	41,036	18,838	14,975	McKenzie, R. ¹	Lib.	Stoughton, Sask.
Humboldt.	41,172	20,049	15,120	Fleming, H. R.	Lib.	Humboldt, Sask.
Kindersley.	39,632	17,797	13,891	Elliott, O. B.	Soc. Cr.	Edmonton, Alta.
Lake Centre.	42,532	19,169	15,441	Johnston, J. F.	Lib.	Bladworth, Sask.
MacKenzie.	46,171	23,534	15,417	MacMillan, J. A.	Lib.	Wadena, Sask.
Maple Creek.	42,428	19,572	15,023	Evans, C. R.	Lib.	Piapot, Sask.
Melfort.	40,687	24,567	19,004	McLean, M.	Lib.	Eldersley, Sask.
Melville.	48,910	23,175	18,455	Motherwell, Hon. W. R.	Lib.	Abernethy, Sask.
Moose Jaw.	43,668	21,562	16,505	Ross, J. G.	Lib.	Moose Jaw, Sask.
North Battleford.	41,513	22,925	15,718	McIntosh, C. R.	Lib.	North Battleford, Sask.
Prince Albert.	39,869	21,082	16,724	King, Rt. Hon. W. L. M.	Lib.	Ottawa, Ont.
Qu'Appelle.	38,015	19,391	15,809	Perley, E. E.	Cons.	Wolseley, Sask.
Regina City.	53,209	30,823	24,969	McNiven, D. A.	Lib.	Regina, Sask.
Rosetown-Biggar.	40,512	18,735	15,277	Coldwell, M. J. W.	C.C.F.	Regina, Sask.
Rosthern.	43,885	19,152	13,291	Tucker, W. A.	Lib.	Rosthern, Sask.
Saskatoon City.	47,362	26,137	19,415	Young, A. M.	Lib.	Saskatoon, Sask.
Swift Current.	46,447	19,206	14,787	Bothwell, C. E.	Lib.	Swift Current, Sask.
The Battlefords.	45,064	23,576	18,415	Needham, J.	Soc. Cr.	Unity, Sask.
Weyburn.	44,710	19,635	16,290	Douglas, T. C.	C.C.F.	Weyburn, Sask.
Wood Mountain.	44,558	18,871	15,046	Donnelly, T. F.	Lib.	Meyronne, Sask.
Yorkton.	50,405	23,333	17,951	McPhee, G. W.	Lib.	Yorkton, Sask.
Alberta—						
(17 members).						
Acadia.	37,423	16,054	10,594	Quelch, V.	Soc. Cr.	Morrin, Alta.
Athabaska.	39,102	19,438	10,576	Rowe, P. J.	Soc. Cr.	Edmonton, Alta.
Battle River.	41,881	21,221	13,613	Fair, R.	Soc. Cr.	Paradise Valley, Alta.
Bow River.	44,491	20,680	14,317	Johnston, C. E.	Soc. Cr.	Three Hills, Alta.
Calgary East.	44,745	25,372	18,184	Landeryou, J. C.	Soc. Cr.	Calgary, Alta.
Calgary West.	41,418	24,915	18,361	Bennett, Rt. Hon. R. B.	Cons.	Ottawa, Ont.
Camrose.	42,717	20,247	13,392	Marshall, J. A.	Soc. Cr.	Bashaw, Alta.
Edmonton East.	46,086	24,956	16,449	Hall, W. S. ²	Soc. Cr.	Edmonton, Alta.
Edmonton West.	39,712	25,917	18,134	MacKinnon, J. A.	Lib.	Edmonton, Alta.
Jasper-Edson.	47,394	25,316	14,835	Kuhl, W. F.	Soc. Cr.	Spruce Grove, Alta.
Lethbridge.	44,708	18,018	12,898	Blackmore, J. H.	Soc. Cr.	Raymond, Alta.
Macleod.	44,325	20,456	14,583	Hansell, E. G.	Soc. Cr.	Vulcan, Alta.
Medicine Hat.	40,986	18,506	13,099	Mitchell, A. H.	Soc. Cr.	Medicine Hat, Alta.
Peace River.	43,761	22,442	11,756	Pelletier, R. A.	Soc. Cr.	Falher, Alta.
Red Deer.	39,758	21,978	13,378	Poole, E. J.	Soc. Cr.	Calgary, Alta.
Vegreville.	47,168	20,678	13,620	Hayhurst, W.	Soc. Cr.	Vegreville, Alta.
Wetaskiwin.	45,330	22,524	13,302	Jaques, N.	Soc. Cr.	Mirror, Alta.
British Columbia—						
(16 members).						
Cariboo.	26,094	15,197	10,480	Turgeon, J. G.	Lib.	Vancouver, B.C.
Comox-Alberni.	28,379	13,533	10,041	Neill, A. W.	Ind.	Alberni, B.C.
Fraser Valley.	31,377	16,579	12,758	Barber, H. J.	Cons.	Chilliwack, B.C.
Kamloops.	29,249	16,085	11,296	O'Neill, T. J.	Lib.	Kamloops, B.C.
Kootenay East.	25,662	12,668	10,175	Stevens, Hon. H. H.	Recon.	Ottawa, Ont.

¹ Mr. McKenzie having accepted an office of emolument under the Crown, Mr. J. G. Gardiner (Lib.) was elected, Jan. 6, 1936.

² Mr. Hall died Jan. 26, 1938.

8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—concluded.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	Party Affiliation.	P.O. Address.
British Columbia—concluded.						
Kootenay West.....	32,556	15,508	11,824	Esling, W. K.....	Cons.....	Rossland, B.C.
Nanaimo.....	45,767	26,155	20,431	Taylor, J. S.....	C.C.F.....	Vancouver, B.C.
New Westminster.....	59,170	33,749	27,280	Reid, T.....	Lib.....	Newton, B.C.
Skeena.....	30,391	11,741	8,382	Hanson, O.....	Lib.....	Prince Rupert, B.C.
Vancouver-Burrard.....	59,583	36,044	28,483	McGeer, G. G.....	Lib.....	Vancouver, B.C.
Vancouver Centre.....	65,683	32,425	22,789	Mackenzie, Hon. I. A.....	Lib.....	Ottawa, Ont.
Vancouver East.....	58,921	34,310	27,105	MacInnis, A.....	C.C.F.....	Vancouver, B.C.
Vancouver North.....	48,906	28,121	21,804	MacNeil, C. G.....	C.C.F.....	Vancouver, B.C.
Vancouver South.....	63,122	39,274	31,251	Green, H. C.....	Cons.....	Vancouver, B.C.
Victoria.....	48,599	28,902	21,585	Plunkett, D. B.....	Cons.....	Victoria, B.C.
Yale.....	40,804	21,777	16,640	Stirling, Hon. G.....	Cons.....	Kelowna, B.C.
Yukon—(1 member).						
Yukon.....	4,230	1,805	1,265	Black, M. L. (Mrs.)	Ind-Cons.	Ottawa, Ont.

¹ Mr. Plunkett died May 3, 1936, and Hon. S. F. Tolmie (Cons.) was elected June 8, 1936. Hon. Mr. Tolmie died Oct. 13, 1937, and Mr. Robert W. Mayhew (Lib.) was elected Nov. 29, 1937.

Subsection 5.—The Dominion Franchise.

An article by Col. J. T. C. Thompson, Dominion Franchise Commissioner, appeared at pp. 86-88 of the 1937 edition of the Year Book. Briefly, the qualifications for the Dominion franchise are that one must be a British subject, of the full age of 21 years, and have been ordinarily resident in Canada for at least one year, and resident for three months in the electoral district in which application is being made for registration.

The Use of the Franchise.—The numbers of voters on the lists and the numbers of votes polled at the general elections of 1925, 1926, 1930, and 1935 are given in Table 9.

9.—Numbers of Voters and Votes Polled at the General Elections of 1925, 1926, 1930, and 1935.

Province.	Numbers of Voters on the Lists.				Numbers of Votes Polled.			
	1925.	1926.	1930.	1935.	1925.	1926.	1930.	1935.
P.E. Island.....	45,454	46,208	46,985	53,284	49,558 ¹	55,569 ¹	59,519 ¹	61,641 ¹
Nova Scotia.....	277,073	273,712	275,762	304,313	222,883 ²	229,846 ²	268,727 ²	275,523 ²
New Brunswick.....	211,190	210,028	207,006	229,266	152,652 ³	162,777 ³	186,277 ³	177,485
Quebec.....	1,124,998	1,133,633	1,351,585 ⁴	1,576,458	805,492	809,295	1,029,480 ⁴	1,162,862
Ontario.....	1,821,906	1,847,512	1,894,624	2,174,188	1,223,027 ⁵	1,226,267 ⁵	1,364,960 ⁶	1,608,244
Manitoba.....	250,505	257,244 ⁴	328,089	377,733	171,124	198,028 ⁴	235,192	284,589
Saskatchewan.....	346,791	353,471	410,400	451,386	197,246	246,460	331,652	347,536
Alberta.....	283,529	279,463	304,475 ⁴	368,956	161,423	157,993	201,635 ⁴	241,107
British Columbia.....	244,352	262,262	333,326	382,117	183,748	185,345	243,631	292,423
Yukon.....	1,621	1,848	1,719	1,805	1,259	1,482	1,408	1,265
Totals.....	4,607,419	4,665,381⁴	5,153,971⁶	5,919,506	3,168,412	3,273,062⁴	3,922,481⁶	4,452,675

¹ Each voter in the double member constituency of Queens County, P.E.I., had two votes; in 1935, 23,467 voters on the list cast 37,576 votes. ² Each voter in the double member constituency of Halifax, N.S., had two votes; in 1935, 60,503 voters on the list cast 85,986 votes. ³ Each voter in the double member constituency of St. John-Albert, N.B., had two votes; in 1930, 37,067 voters on the list cast 50,121 votes.

⁴ Not including one electoral district in which the return was by acclamation. ⁵ Each voter in the double member constituency of Ottawa, Ont., had two votes; in 1930, 61,535 voters on the list cast 97,369 votes. ⁶ Not including two electoral districts in which the returns were by acclamation.

Section 2.—Provincial Governments.

Table 10 gives the names and areas, as in 1938, of the several provinces, territories, and provisional districts of the Dominion, together with the dates of their creation or admission into the Confederation and the legislative process by which this was effected.

10.—Provinces and Territories of Canada, with Present Areas, Dates of Admission to Confederation, and Legislative Process by which Admission was Effected.

Province, Territory, or District.	Date of Admission or Creation.	Legislative Process.	Present Area (square miles).		
			Land.	Fresh Water.	Total.
Ontario.....	July 1, 1867	} Act of Imperial Parliament — The British North America Act, 1867 (30-31 Vict., c. 3), and Imperial Order in Council of May 22, 1867.	363,282	49,300	412,582 ¹
Quebec.....	" 1, 1867		523,534	71,000	594,534 ²
Nova Scotia.....	" 1, 1867		20,743	325	21,068
New Brunswick....	" 1, 1867		27,473	512	27,985
Manitoba.....	" 15, 1870	} Manitoba Act, 1870 (33 Vict., c. 3) and Imperial Order in Council, June 23, 1870	219,723	26,789	246,512 ³
British Columbia..	" 20, 1871		359,279	6,976	366,255
P.E. Island.....	" 1, 1873		2,184	"	2,184
Saskatchewan.....	Sept. 1, 1905		Saskatchewan Act, 1905 (4-5 Edw. VII, c. 42).....	237,975	13,725
Alberta.....	" 1, 1905	Alberta Act, 1905 (4-5 Edw. VII, c. 3).	248,800	6,485	255,285 ⁴
Yukon.....	June 13, 1898	Yukon Territory Act, 1898 (61 Vict., c. 6).....	205,346	1,730	207,076
Mackenzie.....	Jan. 1, 1920	} Order in Council, Mar. 16, 1918.....	493,225	34,265	527,490 ⁵
Keewatin.....	" 1, 1920		218,460	9,700	228,160 ⁵
Franklin.....	" 1, 1920		546,532	7,500	554,032
Totals.....			3,466,556	228,307	3,694,863

¹ The area of Ontario was extended by the Ontario Boundaries Extension Act, 1912 (2 Geo. V, c. 40).

² Extended by Quebec Boundaries Extension Act, 1912 (2 Geo. V, c. 45), and diminished in consequence of the award of the Judicial Committee of the British Privy Council (Mar. 1, 1927), whereby some 112,400 square miles of territory, formerly considered as part of Quebec, were assigned to Newfoundland.

³ Extended by Extension of Boundaries of Manitoba Act, 1881, and Manitoba Boundaries Extension Act, 1912 (2 Geo. V, c. 32).

⁴ Alberta and Saskatchewan now cover approximately the area formerly comprised in the districts of Assiniboia, Athabaska, Alberta, and Saskatchewan, established May 17, 1882, by minute of Canadian P.C., concurred in by Dominion Parliament and Order in Council of Oct. 2, 1895.

⁵ By Order in Council, June 23, 1870, Rupert's Land, acquired under the Rupert's Land Acts of 1867 and 1868, and the undefined Northern Territories were admitted into the Confederation. The original Northwest Territories, mentioned in the Manitoba Act, 1870, were established by the Northwest Territories Act 1880 (43 Vict., c. 25), the district of Keewatin having been previously defined by an Act of the Dominion Parliament (39 Vict., c. 21). The provisional districts of Yukon, Mackenzie, Franklin, and Ungava were defined in an Order in Council of Oct. 2, 1895, their boundaries being changed by Order in Council of Dec. 18, 1897. By Order in Council of July 24, 1905, the area of Keewatin, not included in the Northwest Territories, was annexed to the latter from Sept. 1, 1905. By the Extension of Boundaries Act, 1912, Ungava was made a part of the province of Quebec, and the remaining area of the Northwest Territories south of 60° N. latitude was divided between Manitoba and Ontario.

⁶ Too small to be enumerated.

In each of the provinces the King is represented by a Lieutenant-Governor appointed by the Governor General in Council and governs with the advice and assistance of his Ministry or Executive Council, which is responsible to the Legislature and resigns office when it ceases to enjoy the confidence of that body. The Legislatures of all the provinces with the exception of Quebec are now unicameral, consisting of a Legislative Assembly elected by the people. In Quebec there is a Legislative Council as well as a Legislative Assembly. For detailed description of the Provincial Governments, the reader is referred to pp. 101-115 of the 1922-23 edition of the Year Book.

The Lieutenant-Governors of the provinces, together with the names of the Ministers of the present administrations, are given in Table 11. Details regarding Provincial Legislatures and Ministries from Confederation to 1924 were given on pp. 75-84 of the 1924 Year Book.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present.

NOTE—The Lieutenant-Governor of a province is styled "His Honour" and is also styled "Honourable" throughout his life. Legislatures from Confederation to 1923 will be found on p. 75 of the 1924 Year Book.

PRINCE EDWARD ISLAND.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
W. C. F. Robinson.....	June 10, 1873	D. A. Mackinnon.....	Oct. 3, 1904
Sir Robert Hodgson.....	July 4, 1874	Benjamin Rogers.....	June 1, 1910
Thomas H. Haviland.....	July 14, 1879	A. C. Macdonald.....	June 2, 1915
Andrew Archibald Macdonald.....	Aug. 1, 1884	Murdock McKinnon.....	Sept. 3, 1919
Jedediah S. Carvell.....	Sept. 21, 1889	Frank R. Heartz.....	Sept. 8, 1924
George W. Howlan.....	Feb. 21, 1894	Charles Dalton.....	Nov. 29, 1930
P. A. McIntyre.....	May 13, 1899	George D. DeBlois.....	Dec. 28, 1933

LEGISLATURES, 1924 TO THE PRESENT.

Date of Election.	Legislature.	No. of Sessions.	Date of First Opening.	Date of Dissolution.
July 26, 1923	15th General Assembly.....	4	Mar. 12, 1924.....	May 26, 1927
June 25, 1927	16th General Assembly.....	4	Mar. 20, 1928.....	July 2, 1931
Aug. 6, 1931	17th General Assembly.....	4	Mar. 2, 1932.....	June 15, 1935
July 23, 1935	18th General Assembly.....	1	Sept. 25, 1935.....	1

MINISTRIES.

Ministry.	Premier.	Date of Formation.	Ministry.	Premier.	Date of Formation.
15	Hon. J. D. Stewart, K.C.....	Sept. 5, 1923	19	Hon. W. J. P. Mac-Millan, M.D., C.M....	Oct. 14, 1933
16	Hon. A. C. Saunders, K.C.....	Aug. 12, 1927	20	Hon. W. M. Lea.....	Aug. 15, 1935
17	Hon. W. M. Lea.....	May 20, 1930	21	Hon. T. A. Campbell, K.C.....	Jan. 14, 1936
18	Hon. J. D. Stewart, K.C.....	Aug. 29, 1931			

TWENTY-FIRST MINISTRY.

Office.	Name.	Date of Appointment.
Premier, Provincial Secretary-Treasurer, Attorney and Advocate General.....	Hon. Thane A. Campbell, K.C.....	{ Aug. 15, 1935 Jan. 14, 1936
Minister of Public Works and Highways.....	Hon. James P. McIntyre.....	Aug. 15, 1935
President of the Executive Council.....	Hon. Bradford W. LePage.....	Jan. 14, 1936
Minister of Agriculture.....	Hon. William H. Dennis.....	Jan. 14, 1936
Minister of Education and Public Health.....	Hon. Mark R. McGuigan, K.C.....	Aug. 15, 1935
Minister without Portfolio.....	Hon. Lucas R. Allen.....	Aug. 15, 1935
Minister without Portfolio.....	Hon. John A. Campbell.....	Aug. 15, 1935
Minister without Portfolio.....	Hon. Marin Gallant.....	Aug. 15, 1935
Minister without Portfolio.....	Hon. T. William L. Prowse.....	Aug. 15, 1935

¹ Life of Legislature not yet expired.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

NOVA SCOTIA.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
Lt.-Gen. Sir F. William Williams....	July 1, 1867	Duncan C. Fraser.....	Mar. 27, 1906
Major-Gen. Sir C. Hastings Doyle...	Oct. 18, 1867	James D. McGregor.....	Oct. 18, 1910
Lt.-Gen. Sir C. Hastings Doyle.....	Jan. 31, 1868 ¹	David MacKeen.....	Oct. 19, 1915
Joseph Howe.....	May 1, 1873	MacCallum Grant.....	Nov. 29, 1916
Sir Adams G. Archibald.....	July 4, 1873	MacCallum Grant.....	Mar. 21, 1922 ¹
Matthew Henry Richey.....	July 4, 1883	J. Robson Douglas.....	Jan. 23, 1925
A. W. McLelan.....	July 9, 1888	James C. Tory.....	Sept. 24, 1925
Sir Malachy Bowes Daly.....	July 11, 1890	Frank Stanfield.....	Dec. 2, 1930
Sir Malachy Bowes Daly.....	July 29, 1895 ¹	Walter H. Covert.....	Oct. 5, 1931
Alfred G. Jones.....	Aug. 7, 1900	Robert Irwin.....	May 1, 1937

¹ Second term.

LEGISLATURES, 1924 TO THE PRESENT.

Date of Election.	Legislature.	No. of Sessions.	Date of First Opening.	Date of Dissolution.
July 27, 1920	14th.....	5	Mar. 9, 1921.....	June 2, 1925
June 25, 1925	15th.....	3	Feb. 9, 1926.....	Sept. 5, 1928
Oct. 1, 1925	16th.....	5	Feb. 27, 1929.....	July 13, 1933
Aug. 22, 1933	17th.....	4	Mar. 1, 1934.....	May 20, 1937
June 29, 1937	18th.....	1	Mar. 1, 1938.....	

MINISTRIES.

Ministry.	Premier.	Date of Formation.	Ministry.	Premier.	Date of Formation.
10	Hon. E. N. Rhodes.....	July 16, 1925	12	Hon. A. L. Macdonald..	Sept. 5, 1933
11	Col. The Hon. G. S. Harrington.....	Aug. 11, 1930			

TWELFTH MINISTRY.

Office.	Name.	Date of Appointment.
Premier and President of Council, Provincial Secretary and Treasurer.....	Hon. Angus Lewis Macdonald, K.C....	Sept. 5, 1933
Attorney General, Minister of Lands and Forests and Minister of Municipal Affairs.....	Hon. Josiah H. MacQuarrie, K.C.....	Sept. 5, 1933
Minister of Highways.....	Hon. A. Stirling MacMillan.....	Sept. 5, 1933
Minister of Public Works and Mines and Minister of Labour.....	Hon. Michael Dwyer.....	Sept. 5, 1933
Minister of Agriculture and Marketing.....	Hon. John A. McDonald.....	Sept. 5, 1933
Minister of Public Health.....	Hon. Frank R. Davis, M.D., C.M.....	Sept. 5, 1933
Minister without Portfolio.....	Hon. J. Willie Comeau.....	Sept. 5, 1933

¹ Life of Legislature not yet expired.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

NEW BRUNSWICK.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
Major-Gen. Sir C. Hastings Doyle..	July 1, 1867	A. R. McClellan.....	Dec. 9, 1896
Col. F. P. Harding.....	Oct. 18, 1867	Jabez B. Snowball.....	Feb. 5, 1902
L. A. Wilmot.....	July 14, 1868	L. J. Tweedie.....	Mar. 2, 1907
Samuel Leonard Tilley.....	Nov. 5, 1873	Josiah Wood.....	Mar. 6, 1912
E. Baron Chandler.....	July 16, 1878	G. W. Ganong.....	June 29, 1916
Robert Duncan Wilmot.....	Feb. 11, 1880	William Pugsley.....	Nov. 6, 1917
Sir Samuel Leonard Tilley.....	Oct. 31, 1885	William F. Todd.....	Feb. 24, 1923
John Boyd.....	Sept. 21, 1893	Major-Gen. Hugh H. McLean...	Dec. 28, 1923
John A. Fraser.....	Dec. 20, 1893	Murray MacLaren.....	Feb. 5, 1935

LEGISLATURES, 1924 TO THE PRESENT.

Date of Election.	Legislature.	No. of Sessions.	Date of First Opening.	Date of Dissolution.
Oct. 9, 1920	8th.....	5	Mar. 17, 1921.....	July 17, 1925
Aug. 10, 1925	9th.....	5	Mar. 11, 1926.....	May 26, 1930
June 19, 1930	10th.....	5	Feb. 12, 1931.....	May 22, 1935
June 27, 1935	11th.....	1	Mar. 5, 1936.....	1

MINISTRIES.

Ministry.	Premier.	Date of Formation.	Ministry.	Premier.	Date of Formation.
17	Hon. J. B. M. Baxter...	Sept. 14, 1925	19	Hon. L. P. D. Tilley...	June 1, 1933
18	Hon. C. D. Richards...	May 19, 1931	20	Hon. A. A. Dysart....	July 16, 1935

TWENTIETH MINISTRY.

Office.	Name.	Date of Appointment.
Premier.....	Hon. A. A. Dysart, K.C.....	July 16, 1935
Minister of Public Works.....	Hon. A. A. Dysart, K.C.....	July 16, 1935
Minister of Lands and Mines.....	Hon. F. W. Pirie.....	July 16, 1935
Minister of Agriculture.....	Hon. Austin C. Taylor.....	July 16, 1935
Attorney General.....	Hon. J. B. McNair, K.C.....	July 16, 1935
Minister of Health and Labour.....	Hon. W. F. Roberts, M.D.....	July 16, 1935
Provincial Secretary-Treasurer.....	Hon. C. T. Richard.....	July 16, 1935
President, Executive Council, Minister of Education, Federal and Municipal Relations.....	Hon. A. P. Paterson.....	July 16, 1935
Minister without Portfolio.....	Hon. W. S. Anderson.....	July 16, 1935

¹ Life of Legislature not yet expired.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

QUEBEC.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
Sir Narcisse F. Belleau.....	July 1, 1867	Sir Charles A. P. Pelletier.....	Sept. 4, 1908
Sir Narcisse F. Belleau.....	Jan. 31, 1868 ¹	Sir François Langelier.....	May 5, 1911
René Edouard Caron.....	Feb. 11, 1873	Sir Pierre Evariste Leblanc.....	Feb. 9, 1915
Luc Letellier de St-Just.....	Dec. 15, 1876	Right Hon. Sir Charles Fitzpatrick	Oct. 21, 1918
Théodore Robitaille.....	July 26, 1879	L. P. Brodeur.....	Oct. 31, 1923
L. F. R. Masson.....	Nov. 7, 1884	N. Pérodeau.....	Jan. 8, 1924
A. R. Angers.....	Oct. 24, 1887	Sir Lomer Gouin.....	Jan. 10, 1929
Sir Joseph A. Chapleau.....	Dec. 5, 1892	H. G. Carroll.....	April 2, 1929
L. A. Jetté.....	Feb. 2, 1898	E. L. Patenaude.....	May 3, 1934
Sir Louis A. Jetté.....	Feb. 2, 1903 ¹		

¹ Second term.

LEGISLATURES, 1924 TO THE PRESENT.

Date of Election.	Legislature.	No. of Sessions.	Date of First Opening.	Date of Dissolution.
Feb. 15, 1923	16th.....	4	Dec. 17, 1923.....	April 19, 1927
May 16, 1927	17th.....	4	Jan. 10, 1928.....	July 30, 1931
Aug. 24, 1931	18th.....	4	Nov. 3, 1931.....	Oct. 30, 1935
Nov. 25, 1935	19th.....	1	Mar. 24, 1936.....	June 11, 1936
Aug. 17, 1936	20th.....	1	Oct. 7, 1936.....	

MINISTRIES.

Ministry.	Premier.	Date of Formation.	Ministry.	Premier.	Date of Formation.
16	Hon. L. A. Taschereau.....	July 8, 1920	18	Hon. M. Duplessis.....	Aug. 24, 1936
17	Hon. A. Godbout.....	June 11, 1936			

EIGHTEENTH MINISTRY.

Office.	Name.	Date of Appointment.
Premier, President of the Council and Attorney General.....	Hon. Maurice Duplessis.....	Aug. 24, 1936
Minister of Lands and Forests.....	Hon. Maurice Duplessis.....	Feb. 23, 1937
Minister of Health and Provincial Secretary.....	Hon. J. H. A. Paquette.....	Aug. 24, 1936
Minister of Public Works.....	Hon. J. S. Bourque.....	Aug. 24, 1936
Minister of Mines, Game and Fisheries.....	Hon. Onésime Gagnon.....	Oct. 6, 1936
Minister of Agriculture.....	Hon. Bona Dussault.....	Aug. 24, 1936
Provincial Treasurer.....	Hon. M. B. Fisher.....	Aug. 24, 1936
Minister of Municipal Affairs, Trade and Commerce.....	Hon. J. Bilodeau.....	Aug. 24, 1936
Minister of Colonization.....	Hon. H. L. Auger.....	Aug. 24, 1936
Minister of Roads.....	Hon. F. J. Leduc.....	Aug. 24, 1936
Minister of Labour.....	Hon. W. Tremblay.....	Aug. 24, 1936
Minister without Portfolio.....	Hon. Antonio Elie.....	Aug. 24, 1936
Minister without Portfolio.....	Hon. Sir Thomas Chapais.....	Oct. 6, 1936
Minister without Portfolio.....	Hon. Gilbert Layton.....	Aug. 24, 1936
Minister without Portfolio.....	Hon. T. J. Coonan.....	Aug. 24, 1936

¹ Life of Legislature not yet expired.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

ONTARIO.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
Major-General H. W. Stisted.....	July 1, 1867	Sir William Mortimer Clark.....	April 20, 1903
W. P. Howland.....	July 14, 1868	Sir John M. Gibson.....	Sept. 22, 1908
John W. Crawford.....	Nov. 5, 1873	Lt.-Col. Sir John S. Hendrie.....	Sept. 26, 1914
D. A. Macdonald.....	May 18, 1875	Lionel H. Clarke.....	Nov. 27, 1919
John Beverly Robinson.....	June 30, 1880	Col. Henry Cockshutt.....	Sept. 10, 1921
Sir Alexander Campbell.....	Feb. 8, 1887	William Donald Ross.....	Dec. 30, 1926
Sir George A. Kirkpatrick.....	May 30, 1892	Col. Herbert Alexander Bruce.....	Oct. 25, 1932
Sir Oliver Mowat.....	Nov. 18, 1897	Albert Matthews.....	Nov. 30, 1937

LEGISLATURES, 1924 TO THE PRESENT.

Date of Election.	Legislature.	No. of Sessions.	Date of First Opening.	Date of Dissolution.
June 25, 1923	16th.....	3	Feb. 6, 1924.....	Oct. 18, 1926
Dec. 1, 1926	17th.....	3	Feb. 2, 1927.....	Sept. 16, 1929
Oct. 30, 1929	18th.....	5	Feb. 5, 1930.....	May 16, 1934
June 19, 1934	19th.....	3	Feb. 20, 1935.....	April 9, 1936
Oct. 6, 1937	20th.....	1	Dec. 1, 1937.....	

MINISTRIES.

Ministry.	Premier.	Date of Formation.	Ministry.	Premier.	Date of Formation.
9	Hon. G. H. Ferguson...	July 16, 1923	11	Hon. M. F. Hepburn...	July 10, 1934
10	Hon. G. S. Henry.....	Dec. 15, 1930	12		

ELEVENTH MINISTRY.

Office.	Name.	Date of Appointment.
President of the Council and Treasurer.....	Hon. Mitchell Hepburn.....	July 10, 1934
Secretary and Registrar.....	Hon. Harry C. Nixon.....	July 10, 1934
Minister of Lands and Forests.....	Hon. Peter Heenan.....	July 10, 1934
Minister of Education.....	Hon. Leonard J. Simpson, M.D.....	July 10, 1934
Minister of Highways.....	Hon. Thomas B. McQuesten, K.C.....	July 10, 1934
Minister of Mines.....	Hon. Paul Laduc, K.C.....	July 10, 1934
Minister of Health.....	Hon. Harold J. Kirby, K.C.....	Oct. 12, 1937
Minister of Labour.....	Hon. M. M. MacBride.....	Oct. 12, 1937
Minister of Agriculture.....	Hon. P. M. Dewar.....	Oct. 12, 1937
Minister of Public Works.....	Hon. Colin A. Campbell.....	Oct. 12, 1937
Attorney General.....	Hon. Gordon D. Conant, K.C.....	Oct. 12, 1937
Minister of Municipal Affairs and Public Welfare.	Hon. Eric W. B. Cross, K.C.....	Oct. 12, 1937
Minister without Portfolio.....	Hon. William L. Houck.....	Oct. 12, 1937
Minister without Portfolio.....	Hon. A. St. Clair Gordon.....	Oct. 12, 1937

¹ Life of Legislature not yet expired.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

MANITOBA.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
A. G. Archibald.....	May 20, 1870	Sir Daniel H. McMillan.....	May 11, 1906 ¹
Francis Goodschall Johnson.....	April 9, 1872	Sir Douglas C. Cameron.....	Aug. 1, 1911
Alexander Morris.....	Dec. 2, 1872	Sir James A. M. Aikins.....	Aug. 3, 1916
Joseph E. Cauchon.....	Dec. 2, 1877	Sir James A. M. Aikins.....	Aug. 7, 1921 ¹
James C. Aikins.....	Sept. 22, 1882	Theodore A. Burrows.....	Oct. 9, 1926
J. C. Schultz.....	July 1, 1888	J. D. McGregor.....	Jan. 25, 1929
J. C. Patterson.....	Sept. 2, 1895	William Johnston Tupper.....	Nov. 17, 1934
Sir Daniel H. McMillan.....	Oct. 16, 1900		

¹ Second term.

LEGISLATURES, 1924 TO THE PRESENT.

Date of Election.	Legislature.	No. of Sessions.	Date of First Opening.	Date of Dissolution.
July 18, 1922	17th.....	6	Jan. 18, 1923.....	June 4, 1927
June 28, 1927	18th.....	5	Dec. 1, 1927.....	May 7, 1932
June 16, 1932	19th.....	4	Feb. 14, 1933.....	June 12, 1936
July 27, 1936	20th.....	1	Feb. 18, 1937.....	1

MINISTRIES.

Ministry.	Premier.	Date of Formation.
12	Hon. J. Bracken.....	Aug. 8, 1922

TWELFTH MINISTRY.

Office.	Name.	Date of Appointment.
Premier, President of the Council, Provincial Secretary and Railway Commissioner.....	Hon. John Bracken.....	{ Aug. 8, 1922 Jan. 12, 1925
Attorney General, Minister of Telephones and Telegraphs and Municipal Commissioner.....	Hon. W. J. Major, K.C.....	{ April 29, 1927 Sept. 21, 1936
Minister of Public Works and Labour.....	Hon. W. R. Clubb.....	Aug. 8, 1922
Minister of Agriculture and Immigration.....	Hon. D. L. Campbell.....	Sept. 21, 1936
Minister of Education.....	Hon. Ivan Schultz, K.C.....	Sept. 21, 1936
Minister of Health and Public Welfare.....	Hon. I. B. Griffiths.....	May 28, 1935
Minister of Mines and Natural Resources.....	Hon. J. S. McDiarmid.....	May 27, 1932
Provincial Treasurer.....	Hon. S. S. Garson, K.C.....	Sept. 21, 1936
Minister without Portfolio.....	Hon. S. Marcoux.....	Sept. 21, 1936

¹ Life of Legislature not yet expired.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

SASKATCHEWAN.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
A. E. Forget.....	Sept. 1, 1905	H. W. Newlands.....	Feb. 22, 1926 ¹
George W. Brown.....	Oct. 5, 1910	Lt.-Col. H. E. Munroe, O.B.E.....	Mar. 31, 1931
Sir Richard Stuart Lake.....	Oct. 6, 1915	A. P. McNab.....	Oct. 1, 1936
H. W. Newlands.....	Feb. 17, 1921		

¹ Second term.

LEGISLATURES, 1924 TO THE PRESENT.

Date of Election.	Legislature.	No. of Sessions.	Date of First Opening.	Date of Dissolution.
June 2, 1925	6th.....	4	Dec. 3, 1925.....	May 11, 1929
June 6, 1929	7th.....	6	Sept. 4, 1929.....	May 25, 1934
June 19, 1934	8th.....	1	Nov. 15, 1934.....	¹

MINISTRIES.

Ministry.	Premier.	Date of Formation.	Ministry.	Premier.	Date of Formation.
3	Hon. C. A. Dunning....	Oct. 20, 1916	6	Hon. J. G. Gardiner...	July 19, 1934
4	Hon. J. G. Gardiner....	Feb. 26, 1926	7	Hon. W. J. Patterson...	Nov. 1, 1935
5	Hon. J. T. M. Anderson.	Sept. 9, 1929			

SEVENTH MINISTRY.

Office.	Name.	Date of Appointment.
Premier, President of the Council, Provincial Treasurer and Minister of Telephones and Telegraphs.	Hon. W. J. Patterson.....	Nov. 1, 1935
Attorney General and Minister in Charge of the Loan Companies Act and Trust Companies Act.....	Hon. T. C. Davis, K.C.....	July 19, 1934
Minister of Public Health and Provincial Secretary, and Minister in Charge of the Theatres and Cinematographs Act and the Travelling Shows Act..	Hon. J. M. Uhrich, M.D.....	July 19, 1934
Minister of Education.....	Hon. J. W. Estey, K.C.....	July 19, 1934
Minister of Agriculture.....	Hon. J. G. Taggart.....	July 19, 1934
Minister of Municipal Affairs, Minister in Charge of the Employment Agencies Act, the Mines Act, the Minimum Wage Act, and Bureau of Labour and Public Welfare.....	Hon. R. J. M. Parker.....	July 19, 1934
Minister of Natural Resources and Minister in Charge of the Saskatchewan Insurance Act, the Fire Prevention Act and the Prairie and Forest Fires Act.	Hon. W. F. Kerr.....	Nov. 5, 1935
Minister of Public Works and Minister in Charge of the Steam Boilers Act, and the Saskatchewan Power Commission Act.....	Hon. George Spence.....	July 19, 1934
Minister of Highways and Transportation, Minister in Charge of the Public Printing Act, the Bureau of Publications Act, the Child Welfare Act, and the Old Age Pensions Act.....	Hon. C. M. Dunn.....	July 19, 1934

¹ Life of Legislature not yet expired.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

ALBERTA.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
George H. V. Bulyea.....	Sept. 1, 1905	William Egbert.....	Oct. 20, 1925
George H. V. Bulyea.....	Oct. 5, 1910 ¹	William L. Walsh.....	April 24, 1931
Robert George Brett.....	Oct. 6, 1915	Philip C. H. Primrose.....	Oct. 1, 1936
Robert George Brett.....	Oct. 20, 1920 ¹	J. C. Bowen.....	Mar. 20, 1937

¹ Second term.

LEGISLATURES, 1924 TO THE PRESENT.

Date of Election.	Legislature.	No. of Sessions.	Date of First Opening.	Date of Dissolution.
July 13, 1921	5th.....	6	Feb. 2, 1922.....	May 25, 1926
June 28, 1926	6th.....	4	Feb. 10, 1927.....	May 10, 1930
June 19, 1930	7th.....	5	Jan. 29, 1931.....	July 22, 1935
Aug. 22, 1935	8th.....	¹	Feb. 6, 1936.....	¹

MINISTRIES.

Ministry.	Premier.	Date of Formation.	Ministry.	Premier.	Date of Formation.
4	Hon. Herbert Greenfield	Aug. 13, 1921	6	Hon. R. G. Reid.....	July 10, 1934
5	Hon. J. E. Brownlee. ...	Nov. 23, 1925	7	Hon. Wm. Aberhart...	Sept. 3, 1935

SEVENTH MINISTRY.

Office.	Name.	Date of Appointment.
Premier and Minister of Education.....	Hon. William Aberhart.....	Sept. 3, 1935
Attorney General.....	Hon. William Aberhart.....	Sept. 15, 1937
Provincial Treasurer.....	Hon. Solon Low.....	Feb. 2, 1937
Minister of Lands and Mines.....	Hon. Nathan E. Tanner.....	Jan. 5, 1937
Minister of Agriculture.....	Hon. D. B. Mullen.....	May 1, 1937
Minister of Public Works and Minister of Railways and Telephones.....	Hon. William A. Fallow.....	Sept. 3, 1935
Minister of Health.....	Hon. W. W. Cross, M.D.....	Sept. 3, 1935
Provincial Secretary and Minister of Trade and Industry.....	Hon. E. C. Manning.....	Sept. 3, 1935
Minister of Municipal Affairs.....	Hon. Lucien Maynard.....	Jan. 20, 1937

¹ Life of Legislature not yet expired.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—continued.

BRITISH COLUMBIA.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
J. W. Trutch.....	July 20, 1871	T. W. Patterson.....	Dec. 3, 1909
Albert Norton Richards.....	July 20, 1876	Sir Frank S. Barnard.....	Dec. 5, 1914
Clement F. Cornwall.....	July 20, 1881	Col. Edward G. Prior.....	Dec. 9, 1919
Hugh Nelson.....	Feb. 8, 1887	Walter C. Nichol.....	Dec. 24, 1920
Edgar Dewdney.....	Nov. 1, 1892	R. Randolph Bruce.....	Jan. 21, 1926
Thomas R. McInnes.....	Nov. 18, 1897	J. W. Fordham Johnson.....	Aug. 1, 1931
Sir Henri G. Joly de Lotbinière.....	June 21, 1900	Eric W. Hamber.....	May 1, 1936
James Dunsmuir.....	May 11, 1906		

LEGISLATURES, 1924 TO THE PRESENT.

Date of Election.	Legislature.	No. of Sessions.	Date of First Opening.	Date of Dissolution.
June 20, 1924	16th.....	4	Nov. 3, 1924.....	June 7, 1923
July 18, 1928	17th.....	5	Jan. 22, 1929.....	Aug. 1, 1933
Nov. 2, 1933	18th.....	4	Feb. 20, 1934.....	April 15, 1937
June 1, 1937	19th.....	1	Oct. 26, 1937.....	1

MINISTRIES.

Ministry.	Premier.	Date of Formation.	Ministry.	Premier.	Date of Formation.
19	Hon. John Oliver.....	Mar. 6, 1918	21	Hon. S. F. Tolmie.....	Aug. 21, 1928
20	Hon. J. D. MacLean....	Aug. 20, 1927	22	Hon. T. D. Pattullo....	Nov. 15, 1933

TWENTY-SECOND MINISTRY.

Office.	Name.	Date of Appointment.
Premier and President of Executive Council.....	Hon. T. D. Pattullo.....	Nov. 15, 1933
Minister of Finance.....	Hon. John Hart.....	Nov. 15, 1933
Provincial Secretary and Minister of Education.....	Hon. G. M. Weir.....	Nov. 15, 1933
Attorney General.....	Hon. G. S. Wismer.....	July 5, 1937
Minister of Lands and Municipalities.....	Hon. A. Wellesley Gray.....	Nov. 15, 1933
Minister of Agriculture.....	Hon. K. C. MacDonald.....	Nov. 15, 1933
Minister of Railways and Labour and Commissioner of Fisheries.....	Hon. G. S. Pearson.....	Nov. 15, 1933
Minister of Public Works.....	Hon. F. M. MacPherson.....	Nov. 15, 1933
Minister of Mines and Trade and Industry.....	Hon. W. J. Asseltine.....	Dec. 23, 1937

¹ Life of Legislature not yet expired.

11.—Lieutenant-Governors of Provinces, 1867-1937, Legislatures and Ministries, 1924 to the Present—concluded.

THE TERRITORIES.

NOTE.—In 1888 the districts of Alberta, Assiniboia, Athabaska, and Saskatchewan, then called the Northwest Territories, with their capital at Regina, were given local responsible government, and the old Northwest Council was replaced by the Northwest Legislature, which existed until Aug. 31, 1905. When the area included in these districts was formed into the provinces of Alberta and Saskatchewan, on Sept. 1, 1905, these provinces were given systems of government similar to the other provinces of the Dominion. The remaining areas (Yukon and the provisional districts of Franklin, Keewatin, and Mackenzie) are now administered by the Lands, Parks and Forests Branch, Department of Mines and Resources. The Deputy Minister of the Department is, *ex officio*, the Commissioner of the Northwest Territories, which comprises the three provisional districts.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
A. G. Archibald.....	May 10, 1870	Joseph Royal.....	July 1, 1888
Francis Goodschall Johnson.....	April 9, 1872	C. H. Mackintosh.....	Oct. 31, 1893
Alexander Morris.....	Dec. 2, 1872	M. C. Cameron.....	May 30, 1898
David Laird.....	Oct. 7, 1876	A. E. Forget.....	Oct. 11, 1898
Edgar Dewdney.....	Dec. 3, 1881	A. E. Forget.....	Mar. 30, 1904 ¹

¹ Second term.

PART IV.—REPRESENTATIVES IN OTHER COUNTRIES.*

Section 1.—Representatives Within the Empire.

The policy of the early North American colonies, of maintaining in London accredited representatives for business and diplomatic purposes, was recognized in the eighteenth century as being a more satisfactory means of communication with the British Government than that provided by occasional official visits or by correspondence. Of the Canadian colonies, Nova Scotia was the first to adopt this plan, its Legislature having appointed an Agent in London in 1761. New Brunswick was similarly represented in 1786, Upper Canada as early as 1794, Lower Canada in 1812 and British Columbia in 1857. Following Confederation, several of the provinces continued to adhere to, and in certain cases enlarge upon, the practice to the extent of themselves appointing Crown Agents or Agents General. Such developments as have taken place are dealt with on p. 92 of the 1934-35 Year Book.

The High Commissioner for Canada.—With the federation of the provinces of British North America in 1867, a new political entity which could not avail itself of the services of the provincial Agents was brought into existence. To supplement the ordinary method of communication between the Canadian and British Governments, which at that time was by correspondence between the Governor General and the Secretary of State for the Colonies, the position of High Commissioner for Canada was created in 1880 (see R.S.C. 1927, c. 92). The duties of the office are defined in the Act as follows:—

“The High Commissioner shall—

“(a) act as representative and resident agent of Canada in Great Britain and in that capacity execute such powers and perform such duties as are, from time to time, conferred upon and assigned to him by the Governor in Council;

* Revised by the Department of External Affairs, Ottawa. An annual report on the organization and activities of Canadian Government representation abroad is contained in the Report of the Department of External Affairs, which may be obtained from the King's Printer, price 25 cents.

- “(b) take the charge, supervision and control of the immigration offices and agencies in Great Britain, under the Minister of Immigration and Colonization;
- “(c) carry out such instructions as he, from time to time, receives from the Governor in Council respecting the commercial, financial and general interests of Canada in Great Britain and elsewhere.”

Sir Alexander Galt was the first Canadian High Commissioner, holding office from May 11, 1880, until May, 1883; in 1884 he was succeeded by Sir Charles Tupper. Lord Stratheona and Mount Royal was appointed in 1896. Sir George H. Perley took charge of the High Commissioner's Office in 1914 but was appointed High Commissioner only on Oct. 12, 1917. The Hon. P. C. Larkin was appointed in February, 1922, and after his decease (Feb. 3, 1930) the Hon. G. Howard Ferguson was appointed on Nov. 28, 1930. On Nov. 8, 1935, the Hon. Vincent Massey succeeded Mr. Ferguson in this post. The office of the High Commissioner for Canada is in Canada House, Trafalgar Square, London, S.W. 1.

High Commissioner of the United Kingdom in Canada.—His Majesty's Government in the United Kingdom in April, 1928, appointed a High Commissioner in Canada, Sir William H. Clark, who was succeeded in January, 1935, by Sir Francis Floud, K.C.B. The High Commissioner resides in Ottawa, and his position corresponds to that of the High Commissioner for Canada in the United Kingdom. This appointment was made in consequence of discussions at the Imperial Conference of 1926. The relevant passage in the report of the Inter-Imperial Relations Committee runs as follows:—

“A special aspect of the question of consultation which we considered was that concerning the representation of Great Britain in the Dominions. By reason of his constitutional position, as explained in Section IV (b) of this report, the Governor General is no longer the representative of His Majesty's Government in Great Britain. There is no one therefore in the Dominion capitals in a position to represent with authority the views of His Majesty's Government in Great Britain.

“We summed up our conclusions in the following resolution which is submitted for the consideration of the Conference:—

“The Governments represented at the Imperial Conference are impressed with the desirability of developing a system of personal contact, both in London and in the Dominion capitals, to supplement the present system of intercommunication and the reciprocal supply of information on affairs requiring joint consideration. The manner in which any new system is to be worked out is a matter for consideration and settlement between His Majesty's Governments in Great Britain and the Dominions, with due regard to the circumstances of each particular part of the Empire, it being understood that any new arrangements should be supplementary to, and not in replacement of, the system of direct communication from Government to Government and the special arrangements which have been in force since 1918 for communications between Prime Ministers’.”

Section 2.—Diplomatic Representation Abroad.

The Canadian Minister to the United States.—For many years the diplomatic business between Canada and the United States has been steadily increasing as the natural result of the proximity of the two countries and the closeness of the business relationships between their citizens. Before the Great War, a former British Ambassador at Washington, Lord Bryce, said that between two-

thirds and three-quarters of the work of the British Embassy in the United States was occasioned by Canadian affairs.

In January, 1918, a temporary Canadian War Mission was established at Washington, under the chairmanship of Mr. Lloyd Harris, and was maintained for some years after the close of the War. Though not a formal diplomatic mission, its duties extended to questions usually dealt with through diplomatic channels. After the retirement of this mission, Canada was represented in Washington by Mr. M. M. Mahoney, who acted as agent of the Department of External Affairs, and, through the courtesy of the British Government, occupied an office at the British Embassy.

In 1920, following discussions between the British and Canadian Governments, it was announced that agreement had been reached upon the appointment of a Canadian Minister at Washington, who would act for the British Ambassador in the latter's absence. No appointment was made until Nov. 26, 1926, when, after decision to omit the arrangement that the Canadian Minister should substitute for the British Ambassador, Hon. Vincent Massey was appointed as His Majesty's Envoy Extraordinary and Minister Plenipotentiary in the United States of America to represent the interests of the Dominion of Canada. Mr. Massey took up his duties in February, 1927, and held office until July 23, 1930. Hon. W. D. Herridge, who was appointed Minister to the United States on Mar. 7, 1931, resigned his appointment Oct. 23, 1935. The Hon. Sir Herbert Marler, K.C.M.G., presented his credentials as Canadian Minister on Oct. 20, 1936. The Canadian Legation in Washington is situated at 1746 Massachusetts Avenue.

The Canadian Minister to France.—For many years the Canadian Government maintained an agency at Paris. The post was first occupied in 1882 by Hon. Hector Fabre, who also represented for a time the Government of Quebec. After his death Hon. Philippe Roy was appointed in May, 1911, with the title of Commissioner General of Canada in France. In 1928 an exchange of Ministers was agreed upon between Canada and France, and in September of that year Hon. Philippe Roy was appointed as His Majesty's Envoy Extraordinary and Minister Plenipotentiary in France to represent the interests of the Dominion of Canada. The Canadian Legation in Paris is situated at No. 1, rue François premier.

The Canadian Minister to Japan.—In 1928 an exchange of Ministers was agreed upon between the Governments of Canada and Japan, and Hon. H. M. Marler was appointed in 1929 as His Majesty's Envoy Extraordinary and Minister Plenipotentiary in Japan to represent the interests of the Dominion of Canada. On his appointment as Canadian Minister at Washington he was succeeded by the Hon. R. Randolph Bruce, who presented his credentials to the Emperor of Japan on Nov. 7, 1936. The Canadian Legation is at 16 Omote-Cho, Sancho-me, Akasaka-Ku, Tokyo.

The Permanent Delegate of Canada to the League of Nations.—The practice of appointing permanent representatives at Geneva accredited to the League of Nations has been largely followed by those nations which are situated at a distance from Geneva. It was found that, while countries adjacent to the seat of the League were able, without difficulty, to include in the personnel of their delegations to the Assembly and Council various advisers and assistants at a minimum of expense, distant countries were at a disadvantage in this respect. Canada's duties as a member of the Assembly and of the International Labour Conference, and as one of the countries represented on the Governing Body of the International

Labour Office, made this disadvantage especially felt. Accordingly, the position of Dominion of Canada Advisory Officer, League of Nations, was created and Dr. W. A. Riddell was appointed to the post on Jan. 1, 1925. He was succeeded by Mr. H. H. Wrong on Oct. 25, 1937.

The duties of the Permanent Delegate are "to establish and maintain as close relations as possible with the Secretariats of the League of Nations and the International Labour Office", to "communicate with the Government of Canada as to all matters arising and requiring its attention", and to "act in all such matters in an advisory capacity to the Government of Canada and to delegates from the Government of Canada to conferences arising out of the organizations before-named". The office of the Canadian Permanent Delegate is situated at 41, Quai Wilson, Geneva.

Section 3.—Diplomatic Representation in Canada.

Reference has been made in Section 2 to the beginnings of a Canadian diplomatic service with the appointment of the Hon. Vincent Massey as Canadian Minister at Washington, in 1926, and its extension to France and Japan. These countries have all reciprocated by establishing legations in Ottawa through which their governments transact diplomatic business direct with the Canadian government. In addition, Belgium is also represented by an Envoy Extraordinary and Minister Plenipotentiary in Ottawa.

The following list gives the addresses of the legations with the dates of establishment and the present Ministers:—

Legation of the United States of America: (Established 1927.)

Address: Wellington Street, Ottawa. *Envoy Extraordinary and Minister Plenipotentiary:* (Vacant as at Mar. 26, 1938, *Chargé d'Affaires, ad interim*, Mr. J. F. Simmons.)

Legation of France: (Established 1928.)

Address: 42 Sussex Street, Ottawa. *Envoy Extraordinary and Minister Plenipotentiary:* Count Robert Dampierre.

Legation of Japan: (Established 1928.)

Address: 140 Wellington Street, Ottawa. *Envoy Extraordinary and Minister Plenipotentiary:* Minister Designate as at Mar. 26, 1938, Baron Tomii.

Legation of Belgium: (Established 1937.)

Address: Stadacona Hall, 395 Laurier Avenue East, Ottawa. 680 Sherbrooke Street West, Montreal. *Envoy Extraordinary and Minister Plenipotentiary:* Baron Silvercrucks.

PART V.—CANADA AND THE LEAGUE OF NATIONS.*

The League of Nations is an association of fully self-governing States whose relations are governed by the Covenant. The League of Nations acts through an Assembly and Council composed of representatives of Governments. Fifty-eight States are at present Members of the League, as compared with forty-two at the

* The League of Nations Society in Canada, 124 Wellington St., Ottawa, is the authorized agent for the publications of the League of Nations.

time of the first Assembly in 1920. Canada, as a signatory of the Treaties of Peace, is an original Member of the League.

The League of Nations has two aims: (1) to preserve peace and to seek a settlement of international disputes; and (2) to organize in the most varied spheres co-operation of peoples, with a view to the material and moral welfare of humanity.

The Covenant, which constitutes the fundamental charter of the League of Nations was drafted in 1919 by a Commission of the Peace Conference and inserted at the head of the several Treaties of Peace. It came into force on Jan. 10, 1920.

The Organs of the League.—The organs of the League are:—

- (a) The Assembly;
- (b) The Council;
- (c) The Secretariat;
- (d) The International Labour Organization, (see Chapter XIX);
- (e) The Permanent Court of International Justice.

The Assembly.—The Assembly consists of representatives of the members of the League, and meets annually in ordinary session each September in Geneva. At the 18th Assembly in September, 1937, the Canadian Delegates were the Hon. Raoul Dandurand, the Hon. J. L. Ilsley and the Hon. Vincent Massey.*

The Council.—The Council, which originally consisted of five permanent members and four non-permanent members, now consists of four permanent members (the British Empire, France, Italy, and the U.S.S.R.) together with eleven non-permanent members elected for three years from among the States Members of the League. The non-permanent members of the Council are at present as follows: Ecuador, Poland, and Roumania, terms expiring in 1938; Bolivia, China, Latvia, New Zealand, and Sweden, terms expiring in 1939; Belgium, Iran, and Peru, terms expiring in 1940. Canada was a member of the Council of the League from 1927 to 1930.

The Council, which normally meets four times a year and more frequently if circumstances should require it to do so, may deal at its meetings with any matter within the sphere of action of the League or affecting the peace of the world.

The Secretariat.—The Permanent Secretariat is the Civil Service of the League. The staff is appointed by the Secretary General with the approval of the Council. The officials of the Secretariat of the League are exclusively international officials, having international and not national duties. The first Secretary General, Sir Eric Drummond, who was named in the Annex to the Covenant, resigned in 1933 and was succeeded by M. Joseph Avenol, who is assisted by three Deputy Secretaries General and by one Under-Secretary General.

Permanent Court of International Justice.—The Permanent Court of International Justice was established by the Protocol of Dec. 16, 1920, in accordance with Article 14 of the Covenant of the League of Nations. It is composed of a body of fifteen judges elected by the Assembly and Council of the League of Nations for a term of nine years, and sits at The Hague. The Court is competent to hear and determine any dispute of an international character which the parties thereto submit to it; it may also give an advisory opinion upon any dispute or question referred to it by the Council or the Assembly. Article 36 of the Statute of the

* The Report of the Canadian Delegates to the Eighteenth Assembly of the League of Nations is obtainable from the King's Printer, Ottawa, price 10 cents.

Court provides that any State may recognize as compulsory, the jurisdiction of the Court in all or any classes of legal dispute concerning:—

- (a) The interpretation of a Treaty.
- (b) Any question of international law.
- (c) The existence of any fact which, if established, would constitute a breach of an international obligation, and the nature and extent of the reparations to be made for the breach of the international obligation.

Canada has been a member of the Court from its establishment, and in 1929 accepted, subject to certain reservations, the compulsory jurisdiction of the Court in the cases contemplated in Article 36.

The Budget of the League.—The expenditure of the League is covered by the contributions of States Members which are fixed in accordance with a scale which takes into account the population, area, and public revenue of each State concerned. The budget for the year 1938 was 22,682,148 gold francs reduced after taking account of the returnable surplus to 20,806,753 gold francs. This net sum included 10,202,404 gold francs for the work of the Assembly, Council, and Secretariat; 5,408,135 gold francs for the International Labour Organization, and 1,878,035 gold francs for the Permanent Court of International Justice; the balance of 3,318,178 gold francs is allocated to buildings and pensions. Canada's share of this net assessment is 35/932 of the total, or 780,114.20 gold francs.

Membership of the League of Nations.—The States which are Members of the League (January, 1938) are as follows:—

Afghanistan	Finland	Panama
Union of South Africa	France ¹	Paraguay ¹
Albania	Greece	Peru
Argentine Republic	Guatemala	Poland
Australia	Haiti	Portugal
Austria	Honduras ¹	Roumania
Belgium	Hungary	Salvador ¹
Bolivia	India	Siam
Bulgaria	Iran	Soviet Socialist Republics, Union of
Canada	Iraq	Spain
Chile	Irish Free State	Sweden
China	Italy ¹	Switzerland
Colombia	Latvia	Turkey
Cuba	Liberia	United Kingdom of Great Britain and Northern Ireland
Czechoslovakia	Lithuania	Uruguay
Denmark	Luxemburg	Venezuela
Dominican Republic	Mexico, United States of	Yugoslavia
Ecuador	Netherlands	
Egypt	New Zealand	
Ethiopia	Nicaragua ¹	
Estonia	Norway	

¹ By a communication dated June 22, 1936, Honduras gave notice of her intention to withdraw from the League of Nations, in accordance with Article 1, paragraph 3, of the Covenant. Paraguay and Nicaragua manifested the same intention by telegram dated Feb. 23, 1935, and June 26, 1936, respectively. Salvador gave notice on July 23, 1937, and Italy on Dec. 1, 1937, of their intention of withdrawing from the League.

CHAPTER IV.--POPULATION.*

The Population chapter of the Year Book is a *précis* of the results of investigations into the number and the constitution of the population made in the seven censuses of Canada since Confederation, summarizing the growth and distribution of population between 1871 and 1931, as shown by the successive decennial censuses, in regard to the chief matters investigated at the censuses. Owing to the extent of the field covered, it is quite impossible to include in each edition of the Year Book a full digest of population statistics. The policy adopted, therefore, is to maintain the skeleton of the chapter and the historical tables as a permanent feature and build up each section as statistics are available following each census. After complete and accurate summary statistics have been given publicity, the chapter is cut down to skeleton limits, with adequate references, until the next census. The 1934-35 Year Book gave at pp. 98-169 as complete a picture of the 1931 census statistics as will appear in one Year Book. In the present edition, the chapter has been cut down except in regard to Section 15—Occupations of the People—which subject has not previously received treatment for the Census of 1931.

Under the Canadian constitution, the legal *raison d'être* of the census is to determine representation in the House of Commons; after each decennial census a redistribution of seats in the House, following the course of the movement of population, is made in the manner described on pp. 101-102 of this volume. But the census, especially since the introduction of methods of mechanical tabulation, has become far more than a mere counting of heads. It is a great periodical stock-taking of the people and their affairs, designed to show as fully as possible the stage which has been reached in the progress of the nation. Thus the numbers, local distribution, age, sex, racial origin, nationality, language, religion, education, housing, and occupations of the people, severally, constitute investigations of enormous importance, to which all the continuous and routine statistics collected in the ordinary course of administration must be related if their full value is to be realized. The census, in fine, rounds out and completes the scheme of information upon which the Government relies in conducting the business of the country.

On account of the requirements as to parliamentary representation and the payment of provincial subsidies, which are based on population, the Canadian census is taken on the *de jure* principle; *i.e.*, each person is counted as belonging to the locality in which he is regularly domiciled, irrespective of where he may be at the date of the enumeration. Under the *de facto* method, adopted in the United Kingdom, each individual is counted as belonging to the locality where he is found on the census date. The *de facto* method is undoubtedly simpler, but the *de jure* plan better portrays the permanent condition of the population. The chief difficulty in the application of the latter method is found in connection with holiday resorts, in the segregation of "visitors" and the tracing of "absentees". A date prior to the opening of the holiday season is accordingly chosen for the date of the census. In the Canadian census, students and inmates of hospitals are assigned to their home localities, while inmates of prisons, gaols, lunatic asylums, etc., are counted where found.

* This chapter has been revised by A. J. Pelletier, F.S.S., Chief, Demography Branch, Dominion Bureau of Statistics. A list of the publications of this Branch will be found in Chapter XXIX, Section 1, under "Population".

3.—Population of Canada, by Provinces and Territories, in 1871 and 1931, Numerical Increase in each Decade from 1871 to 1931 and Total Increase.

Province or Territory.	Popula- tion in 1871.	Increase in each Decade from 1871 to 1931.						Popula- tion in 1931.	Increase 1871 to 1931.
		1871 to 1881.	1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.		
	No.	No.	No.	No.	No.	No.	No.	No.	No.
P.E. Island.....	94,021	14,870	187	-5,819	-9,531	-5,113	-577	88,038	-5,983
N.S.....	387,800	52,772	9,824	9,178	32,764	31,499	-10,991	512,846	125,046
N.B.....	285,594	35,639	30	9,857	20,769	35,987	20,343	408,219	122,625
Que.....	1,191,516	167,511	129,508	160,363	356,878	354,889	513,590	2,874,255	1,682,739
Ont.....	1,620,851	306,071	187,399	68,626	344,345	406,370	498,021	3,431,683	1,810,832
Man.....	25,228	37,032	90,246	102,705	206,183	148,724	90,021	700,139	674,911
Sask.....	-	-	-	91,279	401,153	265,078	164,275	921,785	921,785
Alta.....	-	-	-	73,022	301,273	214,159	143,151	731,605	731,605
B.C.....	36,247	13,212	48,714	80,484	213,823	132,102	169,681	694,263	658,016
Yukon.....	-	-	-	27,219	-18,707	-4,355	73	4,230	4,230
N.W.T. ²	48,000	8,446	42,521	-78,838	-13,622	1,481	1,735	9,723	-38,277
Royal Cdn. Navy.	-	-	-	-	-	485	³	³	-
Canada.....	3,689,257	635,553	508,429	538,076	1,835,328	1,581,306	1,588,837	10,376,786	6,687,529

¹ Revised in accordance with the Labrador Award of the Privy Council, Mar. 1, 1927.

² The decreases shown in the population of the Northwest Territories since 1891 are due to the separation therefrom of vast areas to form Alberta, Saskatchewan, and Yukon and to extend the boundaries of Quebec, Ontario, and Manitoba.

³ Members of the Royal Canadian Navy were counted in their homes in the Census of 1931.

4.—Population of Canada, by Provinces and Territories, in 1871, and Increase Per Cent, by Decades, from 1871 to 1931.

Province or Territory.	Popula- tion in 1871.	Increase Per Cent in each Decade from 1871 to 1931.						Increase Per Cent in 60 Years.
		1871 to 1881.	1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.	
	No.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Prince Edward Island.....	94,021	15.82	0.17	-5.33	-9.23	-5.46	-0.65	-6.36
Nova Scotia.....	387,800	13.61	2.23	2.04	7.13	6.40	-2.10	32.24
New Brunswick.....	285,594	12.48	0.01	3.07	6.27	10.23	5.24	42.94
Quebec.....	1,191,516	14.06	9.53	10.77	21.64	17.69 ¹	21.76	141.23
Ontario.....	1,620,851	18.88	9.73	3.25	15.77	16.08	16.98	111.72
Manitoba.....	25,228	146.79	144.95	67.34	80.79	32.23	14.75	2,675.25
Saskatchewan.....	-	-	-	-	439.43	53.83	21.69	-
Alberta.....	-	-	-	-	412.58	57.22	24.33	-
British Columbia.....	36,247	36.45	98.49	81.98	119.63	33.66	32.35	1,815.37
Yukon.....	-	-	-	-	-68.73	51.16	1.76	-
Northwest Territories ²	48,000	17.60	75.33	-79.66	-67.67	22.76	21.72	-79.74
Canada.....	3,689,257	17.23	11.76	11.13	34.17	21.94 ¹	18.08	181.27

For footnotes, see end of Table 3.

Early Censuses.—The credit of taking the first census of modern times belongs to Canada; the year was 1666, the census that of the colony of New France. Still earlier records of settlement at Port Royal (1605) and Quebec (1608) are extant; but the Census of 1666 was a systematic “nominal” enumeration of the people, taken on the *de jure* principle on a fixed date, showing age, sex, occupation, and conjugal and family condition. A second census in 1667 included the areas under cultivation and the numbers of sheep and cattle. When it is recalled that in Europe the first census dates only from the eighteenth century (those of France and

England from the first year of the nineteenth) and that, in the United States, the census begins only with 1790, the achievement of the primitive St. Lawrence colony in instituting what is to-day one of the principal instruments of government throughout the civilized world, may call for more than passing appreciation.

The Census of 1666 (the results occupy 154 pages in manuscript, and are still to be seen in the Archives of Paris, or in a transcript at Ottawa) showed some 3,215 souls. It was repeated at intervals more or less regularly for a hundred years. By 1685 the total had risen to 10,904, including 1,538 Indians settled in villages and living a civilized life under the supervision of the missionaries. By the end of the century it had passed 15,000, and this was doubled in the next twenty-five years. Not to present too much detail, some of which is in the Chronology on pp. 69-77, it may be said that at the time of the cession (1763) the population of New France was nearly 70,000 (69,810 in 1765), while another 10,000 French (thinned to these proportions by the expulsion of the Acadians) were scattered through what are now Nova Scotia, New Brunswick, and Prince Edward Island. The British population of Nova Scotia was 8,104 in 1762, thirteen years after the foundation of Halifax in 1749.

Our chief sources of statistics for half a century and more after the cession are the reports—more or less sporadic—of colonial governors, though censuses of the different sections under British rule were taken at irregular intervals. British settlement on a substantial scale in the Gulf provinces and in Ontario dates only from the Loyalist movement which followed the American Revolution, at the end of which, *i.e.*, about the year of the Constitutional Act (1791), the population of Lower Canada was approximately 163,000, while the newly constituted province of Upper Canada, under Lieutenant-Governor Simcoe, numbered perhaps 15,000, and the addition of the maritime colonies brought the total to well over 200,000. A decade later Canada began the nineteenth century with a population of probably not less than 250,000 or 260,000. Subsequent censuses gave the populations of the different colonies as follows: Upper Canada (1824) 150,066, (1840) 432,159; Lower Canada (1822) 427,465, (1844) 697,084; New Brunswick (1824) 74,176, (1840) 156,162; Nova Scotia (1817) 81,351, (1838) 202,575; Prince Edward Island (1822) 24,600, (1841) 47,042.*

The policy of irregular census-taking was supposed to have been ended after the union of Upper and Lower Canada by an Act, passed on Sept. 18, 1841, which provided for a census in the year 1842 and every fifth year thereafter, but under this Act only the census of Upper Canada was taken and the following year on Dec. 9, the Act was amended, the reason being stated as follows: "Whereas the Census of the inhabitants of Lower Canada, for the year one thousand eight hundred and forty-two as required by an Act of this Legislature, . . . hath not been duly taken . . . and whereas it is of the greatest importance that such Census should be taken. . . . Be it therefore enacted . . .". The Census of 1844 of Lower Canada was taken under this Act.

Another Act was passed and given Royal Assent on July 28, 1847, creating a 'Board of Registration and Statistics' with instructions "to collect statistics and adopt measures for disseminating or publishing the same" and providing for a census to be taken in the year 1848, to be repeated in 1850 and every fifth year thereafter. Under this Act a census of Upper Canada was taken in 1848.

* A résumé of the results of all the censuses taken in Canada between 1666 and 1931 has been published in bulletin form and is included in Vol. I, *Census of 1931*.

Finally an Act was passed on Aug. 30, 1851, providing for a census to be taken in January, 1852, then in the year 1861 and thereafter every tenth year, and that better provision should be made for taking the census. The first census thereunder was taken in January, 1852, and, as similar censuses were taken by New Brunswick and Nova Scotia, we have a regular measure of population growth in Canada over the past 80 years. The 'fifties saw a very rapid development, especially in Ontario, and the 'sixties showed only less substantial gains. In the years following Confederation there was a spurt, the increase between 1871 and 1881 (which included several lean years towards the end) being 635,553, or 17·23 p.c. In neither of the last two decades of the nineteenth century, however, was this record equalled either absolutely or relatively, the gains in each being under 550,000, or 12 p.c. With the end of the century the population of Canada had reached approximately five and a third millions, or twenty times that of 1800. It has increased by five millions in the past thirty years.

Expansion in the Twentieth Century.—It is within the present century that the most spectacular expansion of the population of Canada has taken place. The outstanding feature was, of course, the opening to settlement of the West. The unorganized territories of British North America had been ceded to the Dominion soon after Confederation, and the West had been tapped and traversed by the Canadian Pacific railway in the 'eighties and 'nineties. But though western population was doubled in each of these decades, it was only with the launching of a large-scale immigration movement after 1900 that western settlement and production became a first-rate economic factor. Simultaneously an almost equally striking development occurred in the industrial centres of Eastern Canada, forming the immediate basis for the move upon the West. At the back, of course, was the heavy inflow of British and other capital—a total of \$1,500,000,000 between 1900 and 1912—to finance large constructive undertakings (chiefly railway, municipal, and industrial) which characterized the movement. The years 1901 to 1911, in brief, form the *decas mirabilis* of Canadian expansion. The immigration movement just mentioned, which had previously run well under 50,000 per annum, rose rapidly to over five times that volume, eventually passing 400,000 in a single year. In the ten years between 1901 and 1911 it exceeded 1,800,000 and, though at least a third of these were lost (partly in the return to Europe of labour temporarily attracted by the railway and other developments in progress, and partly in the never-ceasing and natural "drag" of the United States upon a virile and less wealthy people), it formed the chief factor in the gain of 34 p.c. which the total population of Canada registered in that decade, and which was larger than the relative growth of any other country during the same period. The movement was continued and even intensified in the first three years of the second decade of the century, after which a recession set in, to which the outbreak of war gave a new and wholly unexpected turn. Nevertheless, the decade which closed with the Census of 1921 showed over 1,700,000 immigrant arrivals in Canada, and, though the proportionate loss of these was very heavy (probably as much as two-thirds), Canada's relative gain for the decade was again among the largest in the world.

Results of the Census of 1931.—The total population of the Dominion on June 1, 1931, was 10,376,786, as compared with 8,787,949 on June 1, 1921, an increase of 1,588,837 or 18·08 p.c. in the decade, as compared with 21·94 p.c. and 34·17 p.c. during the decades 1911 to 1921 and 1901 to 1911, respectively.

During the decade 1911-21 the countries which comprise the British Empire, and more especially the United States which was in the Great War for only nineteen months as against Canada's fifty-two, had suffered less in actual loss of life from the War and its consequences than the continental countries of Europe. None of them declined in population during the period, as many continental European countries did. Their percentage increases, however, were in almost all cases lower than in the previous decade. Thus the population of England and Wales increased between 1911 and 1921 only from 36,070,492 to 37,886,699, or 5.0 p.c., as compared with an increase of 10.9 p.c. in the previous decade; Scotland, again, increased only from 4,760,904 to 4,882,497, or 2.6 p.c., as compared with 6.5 p.c. between 1901 and 1911. Nor has this situation been much improved in the post-war decade 1921-31, for the increase in England and Wales during these years was but 5.4 p.c. and Scotland actually showed a decrease of 0.8 p.c. Of the overseas Dominions, New Zealand, according to the official estimate* increased her population from 1,218,913 to 1,452,747, or by about 19 p.c. for the decade ended 1931, as compared with 20.9 p.c. and 30.5 p.c., respectively, for the decades ended 1921 and 1911. In the case of the white population of South Africa, much the same condition obtained. The Commonwealth of Australia, the only Dominion to grow more rapidly in the second decade of the twentieth century than in the first, increased from 4,455,005 in 1911 to 5,435,734 in 1921, or by 22.01 p.c., as compared with 18.05 p.c. for 1901-11, and to 6,552,606 in 1931 according to the official estimate,* or by 20.5 p.c. in the decade 1921-31. The population of the continental United States increased between 1920 and 1930 from 105,710,620 to 122,775,046, an increase of 16.1 p.c., as compared with 14.9 p.c. in the decade 1910-20 and 21 p.c. in the decade 1900-10.

Considering now the movement of population within the Dominion of Canada itself, it is evident from Table 1 that in this country, as formerly in the United States, there is a distinct movement of population from east to west. In the decade from 1911 to 1921 this was clearly apparent, for the four western provinces then increased their population by no less than 44 p.c. and for the decade 1921-31 the increase was from 2,480,664 to 3,047,792, or 22.86 p.c. From 1921 to 1931 the five eastern provinces increased from 6,294,655 to 7,315,041, an increase of 1,020,386 persons, which, though absolutely larger than the figure for the West, constitutes an increase of only 16.2 p.c. over the 1921 population. The same conclusion may be deduced from Table 2, which shows that while in 1871 only 2.97 p.c. and in 1881 only 3.89 p.c. of the population of the country dwelt west of the Lake of the Woods, the percentage in 1891 was 7.23; in 1901, 12.02; in 1911, 24.08; in 1921, 28.37; and in 1931, 29.51.

On the other hand, the Maritime Provinces, which in 1871 contained 20.80 p.c. of the total population of the Dominion, had, in 1881, 20.13 p.c.; in 1891, 18.22 p.c.; in 1901, 16.64 p.c.; in 1911, 13.02 p.c.; in 1921, 11.38 p.c.; and in 1931, only 9.72 p.c. of the population. Ontario and Quebec—the old pre-Confederation Province of Canada—still remain the chief centre of population. Their proportion of the total was 60.77 p.c. in 1931, as compared with 76.23 p.c. in 1871, 75.98 p.c. in 1881, 74.54 p.c. in 1891, 71.34 p.c. in 1901, 62.90 p.c. in 1911, and 60.25 p.c. in 1921. In other words, the net result of the sixty years has been that in 1931 three-fifths of the population of the Dominion lived in these provinces as compared with more than three-fourths in 1871.

* In both New Zealand and Australia the 1931 censuses were postponed and were taken in March, 1936, and June, 1933, respectively.

Centres of Population.—The “centre of population”* for the Dominion of Canada was carefully worked out for each census from 1851 to 1931, inclusive, and showed a definite north-westward movement up to 1911, westward for the next decade and northward for 1931. For the censuses of 1851 to 1881 the location was near Valleyfield, Que.; in 1891, it was 25 miles west of Ottawa; in 1901, near Pembroke; in 1911, 45 miles west of Sudbury; in 1921, 50 miles northeast of Sault Ste. Marie; and in 1931, 35 miles north of Sault Ste. Marie.

Density of Population.—The density of population in 1931 (*i.e.*, the number of persons per square mile of the land area as in that year), as compared with 1921, 1911, and 1901, is shown by provinces and for the country as a whole in Table 5.

* The centres of population are the centres of gravity (not the intersections of median lines). The units of area in which the moments (*i.e.*, population multiplied by distance from a fixed point) were calculated, were the permanent counties or census divisions, of which there are about 220, the same units being used so far as possible for all censuses from 1851 to 1931. The geographical centre of the unit area was assumed to be the centre of population of that unit except in the cases of the thinly settled northern areas of counties with very large cities, where special adjustments were made.

5.—Area and Density of Population of Canada, by Provinces, 1901-31.

Province or Territory.	Land Area in Sq. Miles	Population, 1901. ¹		Population, 1911. ¹		Population, 1921.		Population, 1931.	
		Total.	Per Sq. Mile.	Total.	Per Sq. Mile.	Total.	Per Sq. Mile.	Total.	Per Sq. Mile.
P. E. Island.....	2,184	103,259	47.28	93,728	42.92	88,615	40.57	88,038	40.31
Nova Scotia.....	20,743	459,574	22.16	492,338	23.74	523,837	25.25	512,846	24.72
New Brunswick...	27,473	331,120	12.06	351,889	12.81	387,876	14.12	408,219	14.86
Quebec.....	523,534	1,648,898	3.15	2,005,776	3.83	2,360,665 ²	4.51	2,874,255	5.49
Ontario.....	363,282	2,182,947	6.01	2,527,292	6.96	2,933,662	8.08	3,431,683	9.45
Manitoba.....	219,723	255,211	1.16	461,394	2.10	610,118	2.78	700,139	3.19
Saskatchewan.....	237,975	91,279	0.38	492,432	2.07	757,510	3.18	921,785	3.87
Alberta.....	248,800	73,022	0.29	374,295	1.50	588,454	2.37	731,605	2.94
British Columbia.	359,279	178,657	0.50	392,480	1.09	524,582	1.46	694,263	1.93
Canada (Exclusive of the Territories).....	2,002,993	5,323,967	2.66	7,191,624	3.59	8,775,319²	4.38	10,362,833	5.18
Yukon.....	205,346	27,219	0.13	8,512	0.04	4,157	0.02	4,230	0.02
N.W.T.....	1,258,217	20,129	0.02	6,507	0.01	7,988	0.01	9,723	0.01
R. Cdn. Navy....	—	—	—	—	—	485	—	—	—
Canada.....	3,466,556	5,371,315	1.55	7,206,643	2.08	8,787,949²	2.53	10,376,786	2.99

¹ The populations of Ontario, Quebec, Manitoba, and Northwest Territories were adjusted for 1911 according to the provisions of the Boundary Extensions Acts, 1912, but such adjustment was not carried back to 1901.

² Populations of Northwest River Arm and Rigolet, on Hamilton inlet, as in 1921, have been deducted from Quebec, as these parts were awarded to Newfoundland by decision of the Judicial Committee of the Privy Council, Mar. 1, 1927.

Figures showing the density of population in 1931, by counties and census divisions, were given at pp. 109-110 of the 1934-35 Year Book. Generally speaking, the density of population decreases as one travels westward, but the enormous area of the province of Quebec unduly reduces the density of its population, which was 5.49 in 1931. As among the nine provinces, the density of population is greatest in Prince Edward Island and least in British Columbia.

The densities of population in various countries in recent years are given in Table 6. It should not be assumed, however, that a low density is necessarily evidence of under-population. If density could be expressed in terms of estimated habitable area, the figures would be more comparable, but even then natural physical factors, such as climate, topography, physical condition of the soil, mineral wealth, etc., would not be adequately weighted. These considerations should be borne in mind when comparing the figures of this table.

6.—Densities of Population in Various Countries in Recent Years.

NOTE.—The following figures, for countries other than Canada and China, are based on data taken from the Statistical Year Book of the League of Nations 1936-37. The population figures of the latest census are used and total population is taken except where indicated otherwise by footnotes.

Country.	Year.	Persons per Sq. Mile.	Country.	Year.	Persons per Sq. Mile.
Belgium.....	1930	697.59	United States of America (not including Alaska).....	1930	40.57
Netherlands.....	1930	605.80	Sweden.....	1931	35.50
United Kingdom (including Channel islands and Isle of Man)	1931	490.74	Norway.....	1930	22.57
Japan.....	1935	469.50	Russia ²	1935	20.85
Germany (not including Saar Territory).....	1933	360.77	Russia in Europe ²	1935	58.06
Italy.....	1936	354.61	Union of South Africa.....	1936	20.32
China proper ¹	1931	234.87	New Zealand.....	1936	15.20
Poland.....	1931	214.51	Argentina ²	1935	11.32
India.....	1931	195.07	Southern Rhodesia.....	1931	7.38
British India.....	1931	247.67	Canada.....	1931	2.99
France.....	1936	196.97	Canada, exclusive of the Terri- tories.....	1931	5.18
Spain (including Canary islands).	1930	121.34	Commonwealth of Australia....	1933	2.23
Irish Free State.....	1936	111.33			

¹ Estimate as of Dec. 31, 1931, taken from Canada Year Book, 1934-35, p. 168.
Dec. 31, 1935.

² Estimate as at

Elements of Growth.—The former lack of comprehensive and comparable vital statistics for the whole of Canada, together with the lack of statistics of emigration, make it difficult to determine how far the growth of population since the commencement of the twentieth century is due to natural increase and how far to immigration. In Table 7 figures of movement are given as closely as they can be estimated. During the decade 1911-21, in addition to 60,000 Canadians who died overseas and nearly 20,000 who took their discharge in the United Kingdom, there were also great numbers of residents of Canada—most of them recent immigrants—who left Canada to join the forces of the Mother Country and her allies in the Great War and did not return.

7.—Movement of Population, Including Estimated Natural Increase, Recorded Immigration and Estimated Emigration for the Intercensal Periods 1901-11, 1911-21, and 1921-31.

Decade and Item.	No.
Decade, 1901-11—	
Population, Census of April 1, 1901.....	5,371,315
Natural increase (1901-11), estimated.....	853,566
Immigration (April 1, 1901, to May 31, 1911).....	1,847,651
Total.....	8,072,532
Population, Census of June 1, 1911.....	7,206,643
Emigration (April 1, 1901, to May 31, 1911), estimated.....	865,889
Decade, 1911-21—	
Population, Census of June 1, 1911.....	7,206,643
Natural increase (1911-21), estimated.....	1,150,125
Immigration (June 1, 1911, to May 31, 1921).....	1,728,921
Total.....	10,085,689
Population, Census of June 1, 1921.....	8,787,949 ¹
Emigration (June 1, 1911, to May 31, 1921), estimated.....	1,297,740 ²
Decade, 1921-31—	
Population, Census of June 1, 1921.....	8,787,949 ¹
Natural Increase (1921-31), partly estimated for the years 1921-25 in the case of Quebec...	1,325,256
Immigration (June 1, 1921, to May 31, 1931), including 288,874 returned Canadians.....	1,509,136
Total.....	11,622,341
Population, Census of June 1, 1931.....	10,376,786
Emigration (June 1, 1921, to May 31, 1931), estimated.....	1,245,555
Net Gain in Population, 1901-11.....	1,835,328
Net Gain in Population, 1911-21.....	1,581,306
Net Gain in Population, 1921-31.....	1,588,837

¹ Revised in accordance with the Labrador Award of the Privy Council, Mar. 1, 1927.

² This figure includes also the 60,000 Canadian lives lost at the Front and the soldiers (about 20,000) enlisting in the Canadian forces and receiving their discharge in the United Kingdom.

Section 2.—Sex Distribution.

Throughout the older countries of the world there is usually found an excess of female over male population, more especially as in most of these countries the census is taken on a *de facto* instead of, as in Canada, on a *de jure* basis. The causes of this excess of female population are: (1) the normally higher rate of mortality among males; (2) the greater number of males who travel; (3) the effects of war; (4) the employment of males in the army, navy and merchant marine; and (5) the preponderance of males among emigrants. In the newer countries of the world, however, the preponderance of males among immigrants results in a general excess of male over female population. These phenomena are exemplified for both the older and the newer countries in Table 9.

In Canada there has been an excess of male population from the commencement of its history, the first census, 1666, showing 2,034 males to only 1,181 females. As the colony increased in numbers, the disproportion between the sexes became smaller, more especially since the French-Canadian population, after about 1680,

was not reinforced by immigration from the Old World. In 1784, when the English-speaking immigration to Canada for purposes of settlement was commencing, there were 54,064 males and 50,759 females in the colony. At the middle of the nineteenth century, there were 449,967 males to 440,294 females in Lower Canada, and 499,067 males to 452,937 females in the more newly-settled Upper Canada, and since Confederation the same phenomenon of considerable excess of males has occurred throughout the growing northwest. The great immigration of the first decade of the present century resulted in raising what is called the "masculinity" of the Canadian population (*i.e.*, the excess of males over females per 100 of population) to the highest point in recent history, *viz.*, 6.07 p.c. in 1911. The Great War, however, both checked immigration and took about 60,000 young Canadian male lives as its toll, with the result that at the Census of 1921 the masculinity of our population was only 3 p.c.—515 males to 485 females per 1,000 of population.

In 1931 there were 518 males to 482 females for Canada as a whole. It is interesting to note that the masculinity of the population has increased in the eastern provinces and decreased in the western ones, where it was formerly greatest. In Table 8 statistics are presented, showing the number of males and females in each of the provinces and territories at each census since 1871. A table showing the proportions of the sexes and excess of males per 1,000 of population, 1871-1931, appears at p. 113 of the 1934-35 Year Book. The statistics of Table 9 show the position of Canada among other countries of the world in regard to masculinity.

8.—Sex Distribution of the People of Canada, by Provinces, 1871-1931.

Province or Territory.	1871.		1881.		1891.	
	Male.	Female.	Male.	Female.	Male.	Female.
Prince Edward Island.....	47,121	46,900	54,729	54,162	54,881	54,197
Nova Scotia.....	193,792	194,008	220,538	220,034	227,093	223,303
New Brunswick.....	145,888	139,706	164,119	157,114	163,739	157,524
Quebec.....	596,041	595,475	678,175	680,852	744,141	744,394
Ontario.....	828,590	792,261	978,554	948,368	1,069,487	1,044,834
Manitoba.....	12,864	12,364	35,123	27,137	84,342	68,164
Saskatchewan.....	—	—	—	—	—	—
Alberta.....	—	—	—	—	—	—
British Columbia.....	20,694	15,553	29,503	19,956	63,003	35,170
Yukon.....	—	—	—	—	—	—
Northwest Territories.....	24,274	23,726	28,113	28,333	53,785	45,182
Canada.....	1,869,264	1,819,993	2,188,854	2,135,956	2,460,471	2,372,768

Province or Territory.	1901.		1911.		1921.		1931.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
P. E. Island.....	51,959	51,300	47,069	46,659	44,887	43,728	45,392	42,646
Nova Scotia.....	233,642	225,932	251,019	241,319	266,472	257,365	263,104	249,742
New Brunswick.....	168,639	162,481	179,867	172,022	197,351	190,525	208,620	199,599
Quebec.....	824,454	824,444	1,012,815	992,961	1,179,726	1,180,939	1,447,124	1,427,131
Ontario.....	1,096,640	1,086,307	1,301,272	1,226,020	1,481,890	1,451,772	1,748,844	1,682,839
Manitoba.....	138,504	116,707	252,954	208,440	320,567	289,551	368,065	332,074
Saskatchewan.....	49,431	41,848	291,730	200,702	413,700	343,810	499,935	421,850
Alberta.....	41,019	32,003	223,792	150,503	324,208	264,246	400,199	331,406
British Columbia.....	114,160	64,497	251,619	140,861	293,409	231,173	385,219	309,044
Yukon.....	23,084	4,135	6,508	2,004	2,819	1,338	2,825	1,405
N.W.Territories...	10,176	9,953	3,350	3,157	4,129	3,859	5,214	4,509
Canada.....	2,751,708	2,619,607	3,821,995	3,384,648	4,529,643	4,258,306	5,374,541	5,002,245

¹ Includes 485, Royal Canadian Navy.

9.—Masculinity of the Populations of Various Countries in Recent Years.

NOTE.—A minus sign denotes a deficiency of males. The figures are calculated from population figures of the latest census in each case, as given by the League of Nations Year Book, 1936-37, except as indicated by footnotes.

Country.	Year.	Excess of Males over Females in each 100 of Population.	Country.	Year.	Excess of Males over Females in each 100 of Population.
Argentina ¹	1928	6.58	Denmark.....	1935	-1.57
Canada.....	1931	3.58	Finland.....	1930	-2.06
India.....	1931	3.06	Italy.....	1931	-2.22
Irish Free State.....	1936	2.43	Spain.....	1930	-2.42
Union of South Africa ²	1931	1.76	Norway.....	1930	-2.48
Australia.....	1933	1.56	Germany.....	1933	-2.92
New Zealand ²	1936	1.41	Czechoslovakia.....	1930	-3.00
United States.....	1930	1.22	Northern Ireland.....	1926	-3.26
Bulgaria.....	1934	0.42	France.....	1931	-3.40
Japan.....	1935	0.31	Switzerland.....	1930	-3.66
Netherlands.....	1930	-0.64	Austria.....	1934	-3.90
Greece.....	1928	-0.84	Scotland.....	1931	-3.94
Belgium.....	1930	-0.96	England and Wales.....	1931	-4.18
Chile.....	1930	-0.98	Portugal.....	1930	-4.60
Sweden.....	1931	-1.54	U.S.S.R. (Europe).....	1926	-4.90

¹ 1928 estimate.
population only.

² Excluding Maoris. From New Zealand Year Book, 1937.

³ White

Section 3.—Conjugal Condition.

In Table 10 are given, in summary form, the statistics of the conjugal condition of the population, as single, married, widowed, divorced, and legally separated, for 1871 and subsequent censuses. Especially notable is the larger proportion of married in the more recent years. This is mainly attributable to the larger proportion of adults to total population in our own time. Noteworthy also is the larger proportion of divorced and legally separated in later years. A table showing the conjugal condition of the people, as percentages of the total population, was given at p. 110 of the 1936 Year Book. Another table, showing conjugal condition by sex and provinces, will be found at the same place. At pp. 115-116 of the 1934-35 Year Book a table appears showing the conjugal condition of the 1931 population, 15 years of age or over by age groups. The reader is referred to p. 172 of this volume for details of divorces granted in the years 1918-37.

10.—Conjugal Condition of the Population, as Shown by the Censuses of 1871, 1881, 1891, 1901, 1911, 1921, and 1931.

Census Year and Sex.	Single.	Married.	Widowed.	Divorced.	Legally Separ- ated.	Not Given.	Total.
1871 ¹ —Male.....	1,183,787	543,037	37,487	—	—	—	1,764,311
Female.....	1,099,216	542,339	79,895	—	—	—	1,721,450
1881—Male.....	1,447,415	690,544	50,895	—	—	—	2,188,854
Female.....	1,336,981	689,540	109,435	—	—	—	2,135,956
1891—Male.....	1,601,541	796,153	62,777	—	—	—	2,460,471
Female.....	1,451,851	791,902	129,015	—	—	—	2,372,768
1901—Male.....	1,748,582	928,952	73,837	337	—	—	2,751,708
Female.....	1,564,011	904,091	151,181	324	—	—	2,619,607
1911—Male.....	2,369,766	1,331,853	89,154	839	1,286	29,097	3,821,995
Female.....	1,941,886	1,251,468	179,656	691	1,584	9,363	3,384,648
1921—Male.....	2,698,564	1,698,297	119,695	3,670	2	9,417	4,529,643
Female.....	2,378,728	1,631,663	236,504	3,731	2	7,680	4,258,306
1931—Male.....	3,179,444	2,033,240	148,954	4,049	3	8,854	5,374,541
Female.....	2,771,968	1,937,950	288,641	3,392	3	294	5,002,245

¹ The figures for 1871 cover the four original provinces of Canada only.
included with divorced.

² Legally separated included with married.

³ Legally separated in-

Section 4.—Age Distribution.

The same causes which have in the past rendered the sex distribution of population in Canada somewhat unusual have also affected its age distribution. In the first stages of the settlement of a new colony, men in the prime of life constitute the bulk of the population, and women and children are conspicuous by their absence, so that there will be a disproportionately large male population between the ages of 20 and 50, together with a low birth rate. Later on in the settlement of a new country, where there is land and food for all and where the early disproportion of the sexes has been overcome, there is a very high rate of natural increase, and an extraordinarily large proportion of children among the population. Thus in 1871 (see Table 11), 286·91 out of every 1,000 of the population of Canada were children under 10 years of age, and over half the total population (526·76 out of every 1,000) were under 20 years of age. But, with the growing urbanization of population, the average age at marriage increased and children came to be regarded as a liability rather than an asset. Thus in 1911, out of every 1,000 of the population, only 231·83 were under 10 years of age and 423·42 under 20 years of age. In 1921, however, 239·67 per 1,000 of the population were under 10 years of age and 434·81 per 1,000 under 20 years. In 1931, the number of children under 10 years of age had dropped to 212·70 per 1,000 of the population, and of persons under 20 to 416·39 per 1,000.

Table 12 shows the varying age distribution of the population of the respective provinces. At p. 118 of the 1934-35 Year Book details of the age distribution of the population of the Dominion, by sex, for the census years 1881 to 1931 were given.

11.—Proportion per 1,000 of the Population by Age Periods, 1871, 1881, 1891, 1901, 1911, 1921, and 1931.

Age Period.	1871.	1881.	1891.	1901.	1911.	1921.	1931.
Under 1 year.....	30·567	28·019	24·923	24·497	25·734	23·858	19·531
1—4 years.....	115·649	108·507	99·964	95·210	97·413	96·482	84·009
5—9 “.....	140·691	128·251	121·242	114·664	108·685	119·333	109·162
10—19 “.....	239·854	227·404	219·710	210·906	191·585	195·138	203·689
20—29 “.....	171·436	175·957	178·080	173·549	189·335	159·041	163·583
30—39 “.....	111·404	113·099	122·080	129·259	141·938	146·247	134·656
40—49 “.....	79·995	83·817	88·441	98·494	100·071	109·481	118·660
50—59 “.....	54·788	58·087	62·360	67·886	69·121	73·082	82·463
60 or over.....	55·128	63·270	70·142	76·397	71·027	74·917	83·882
Not given.....	0·488	13·589	13·059	9·137	5·090	2·419	0·363

12.—Proportion per 1,000 of the Population by Age Periods, by Provinces, 1931, with Totals for 1921.

Province.	0-9 Years.	10-19 Years.	20-44 Years.	45-69 Years.	70 Years or Over.	Age Not Given.
Prince Edward Island.....	212·47	207·97	308·15	206·52	64·81	0·08
Nova Scotia.....	215·36	214·17	320·93	198·39	50·93	0·22
New Brunswick.....	239·83	219·63	317·25	181·18	41·95	0·17
Quebec.....	245·89	214·20	352·95	157·69	29·05	0·23
Ontario.....	186·68	185·67	373·92	212·28	41·20	0·25
Manitoba.....	203·29	219·27	365·99	185·52	25·72	0·20
Saskatchewan.....	234·80	228·98	353·08	163·81	19·12	0·21
Alberta.....	217·98	210·00	374·07	178·47	19·32	0·16
British Columbia.....	160·07	175·97	377·16	254·66	29·97	2·17
Canada, 1931¹.....	212·70	203·69	360·50	185·52	33·22	0·36
Canada, 1921¹.....	239·67	195·14	365·27	169·38	28·12	2·42

¹The statistics for Yukon and the Northwest Territories are included in the totals.

Age Distribution by Sex.—An interesting table of quartile and decile age distribution, by sex, with textual interpretation, was given at pp. 119-120 of the 1934-35 Year Book. It is not repeated in order to conserve space.

Section 5.—Racial Origins.

In six out of seven censuses of Canada since Confederation the racial origin of each person has been secured, the exception being 1891. The object of this information is to ascertain from what basic ethnic stocks the Canadian population, more particularly the recently immigrated population, is derived. The answer "Canadian" is not accepted under this heading, as the purpose of the question is to obtain, in so far as possible, a definition of "Canadian" in terms of racial derivation. Of this procedure of the census, criticism has been received on two main grounds: (a) that there are Canadians whose family is of several generations residence in the country who may not know their ultimate racial origin, or who may be of very mixed racial origin; (b) that the practice tends to perpetuate racial distinctions which it is desirable to obliterate. As against these criticisms the following three points must be considered: (a) that the Canadian whose family is of three or more generations residence is enumerated and differentiated through the census question on the birthplace of parents for which statistics from the 1931 Census appeared at pp. 134-139 of the 1934-35 Year Book; (b) that notwithstanding the desirability of racial assimilation, there are special features in connection with the process that require appraisal and study—for example, 271 children of Chinese fathers and 842 of Japanese fathers were born in Canada in 1931. Again, the fact that the constitution of Canada is based on the presence of two dominant races points to the desirability of a measurement of these factors: only recently it has been widely pointed out that the original French colony, numbering 75,000 at the date of the Conquest, has expanded to over three millions to-day. Measurements of this kind would be impossible if the answer "Canadian" instead of "French" were accepted under the heading of racial origin, yet undoubtedly if the descendants of the original French colonists are not "Canadians", no one is; (c) finally, racial origin is an important subject for study in a "new" country like Canada from a scientific standpoint, *i.e.*, from the standpoint of the student of ethnology, criminology, and the social and "biometric" sciences in general.

To accept the answer "Canadian" to the question on racial origin would confuse the data and defeat the purpose for which the question is asked.

Racial Distribution.—The total increase in population over the decade 1921-31 was 1,588,837. The population of English origin increased by only 196,061 compared with 722,208 in the previous decade; that of Scottish origin by 172,725 compared with 175,745; and that of Irish origin by 123,005 compared with 57,419. The population of British origin, taken together, increased from 4,868,738 to 5,381,071, or by 512,333, between 1921 and 1931. This represented 32 p.c. of the total increase as compared with 61 p.c. of the total increase for the previous decade. On the other hand, the population of French origin increased from 2,452,743 in 1921 to 2,927,990 in 1931, or by 475,247 (slightly under 30 p.c. of the total increase for the decade) and showed the greatest absolute increase for any decade since 1871. Figures for the minor racial groups that help to compose the nation (see Table 13) indicate that the people of Scandinavian, German, and Ukrainian origins increased between 1921 and 1931 by 36 p.c., 61 p.c., and 111 p.c., respectively. Owing to the new national and racial alignments in Central and Southeastern Europe following the Great War, comparison of the post-war numerical strength of certain ethnic stocks in Canada with pre-war returns cannot be made with any certainty. For example, a number of people reported as of Ukrainian stock in the Seventh Census were described in the Censuses of 1921 and 1911 as Galician, Bukovinian, Ruthenian, or Russian.

A perspective of the percentage relationship of the origin groups to the population as a whole was given in tabular form for the censuses 1871 to 1931 at p. 123 of the 1934-35 Year Book. Table 13, below, gives the actual figures for the same years.

Together, the British and French groups constituted, in 1931, 80 p.c. of the total population, compared with 83 p.c. in 1921 and 1911, 88 p.c. in 1901, 89 p.c. in 1881 and no less than 92 p.c. in 1871. The immigration of continental Europeans to Canada during the past thirty years has, of course, been the cause of this decline.

13.—Origins of the People According to the Censuses of 1871, 1881, 1901, 1911, 1921, and 1931.

NOTE.—Origins were not taken in the Census of 1891.

Origin.	1871. ¹	1881.	1901.	1911.	1921.	1931.
British—						
English.....	706,369	881,301	1,260,899	1,823,150	2,545,358	2,741,419
Irish.....	846,414	957,403	988,721	1,050,384	1,107,803	1,230,808
Scottish.....	549,946	699,863	800,154	997,880	1,173,625	1,346,350
Other.....	7,773	9,947	13,421	25,571	41,952	62,494
Totals, British.....	2,110,502	2,548,514	3,063,195	3,896,985	4,868,738	5,331,071
French.....	1,082,940	1,298,929	1,649,371	2,054,890	2,452,743	2,927,990
Austrian, <i>n.o.p.</i>	—	—	10,947	42,535	107,671	48,639
Belgian.....	—	—	2,994	9,593	20,234	27,585
Bulgarian and Rumanian...	—	—	354	5,875	15,235	32,216
Chinese.....	—	4,383	17,312	27,774	39,587	46,519
Czech (Bohemian and Mora-	—	—	—	—	8,840	30,401
vian).....	—	—	—	—	—	—
Dutch.....	29,662	30,412	33,845	54,986	117,505	148,962
Finnish.....	—	—	2,502	15,497	21,494	43,885
German.....	202,991	254,319	310,501	393,320	294,635	473,544
Greek.....	—	—	291	3,594	5,740	9,444
Hebrew.....	125	667	16,131	75,681	126,196	156,726
Hungarian.....	—	—	1,549	11,605	13,181	40,582
Indian and Eskimo ²	23,037	108,547	127,941	105,492	113,724	128,890
Italian.....	1,035	1,849	10,834	45,411	66,769	98,173
Japanese.....	—	—	4,738	9,021	15,868	23,342
Negro.....	21,496	21,394	17,437	16,877	18,291	19,456
Polish.....	—	—	6,285	33,365	53,403	145,503
Russian.....	607	1,227	19,825	43,142	100,064	88,148
Scandinavian ³	1,623	5,223	31,042	107,535	167,359	228,049
Ukrainian.....	—	—	5,682	74,963	106,721	225,113
Yugoslavic.....	—	—	—	—	3,906	16,174
Various.....	4,182	8,540	7,000	31,157	28,796	27,476
Unspecified.....	7,561	40,806	31,539	147,345	21,249	8,898
Grand Totals.....	3,485,761	4,324,810	5,371,315	7,206,643	8,787,949	10,376,786

¹ The figures for 1871 cover the four original provinces of Canada only.

includes "half-breeds" in 1901.

² Incomplete in 1871; includes Danish, Icelandic, Norwegian, and Swedish; in 1921 they numbered, respectively, 21,124, 15,876, 68,856 and 61,503; in 1931, 34,118, 19,382, 93,243 and 81,306.

Section 6.—Religions.

At each of the censuses from 1871 to 1931 every inhabitant of Canada has been asked to state the religious body of which he is a member or an adherent. During the sixty-year period there have been various fluctuations in the proportions of the population belonging to the leading religious bodies, and these fluctuations are, in a new country like this, largely occasioned by the religious affiliations of immigrants.

Throughout the sixty-year period something like two-fifths of the population of Canada has been of the Roman Catholic faith, the 1931 percentage, inclusive of Greek Catholics, being 41.30. Methodists were 16.27 p.c. of the population in 1871 but fell to 13.19 p.c. in 1921, while Presbyterians increased from 15.63 p.c. in 1871 to 16.04 p.c. in 1921, being reinforced by a considerable immigration from Scotland after the beginning of the century. The fusion of the Methodists

and Congregationalists in 1925 with a large section of the Presbyterians, as the United Church of Canada, left that body the second largest religious body in the Dominion in 1931 with 19.44 p.c. of the population. The Presbyterians who did not adhere to the United Church of Canada amounted to 8.39 p.c. of the population in 1931. The proportion of Anglicans in the population of Canada fell from 14.17 p.c. in 1871 to 12.69 p.c. in 1901 but thereafter the large immigration from the British Isles raised it to 16.02 p.c. in 1921, followed by a slight falling-off to 15.76 p.c. in 1931. The Baptists have shown a fairly steady decline from 6.87 p.c. in 1871 to 4.27 p.c. in 1931.

The immigration from non-English-speaking countries during the first three decades of the twentieth century led to a great growth of the religious bodies which have as their home the continent of Europe. Thus the Lutherans, who were only 1.09 p.c. of the population in 1871 and 1.72 p.c. in 1901, rose to 3.80 p.c. in 1931. The Jews, again, who were only 0.03 p.c. in 1871 and 0.31 p.c. in 1901, were 1.50 p.c. in 1931. The adherents of the Greek Orthodox Church, who in earlier years were not distinguished from Greek Catholics (the two together being only 0.29 p.c. in 1901) were 0.99 p.c. in 1931.

Of the total population in 1931 (10,376,786), 16,042 or 0.15 p.c. did not state their religion while 54,164 persons, or 0.52 p.c., belonging to small sects, were classed as "various" and 21,071 or 0.20 p.c. as of "no religion". Of the non-Christian sects, 155,614 or 1.50 p.c. were Jews, 24,087 or 0.23 p.c. were Confucians, 15,784 or 0.15 p.c. were Buddhists, and 5,008 or 0.05 p.c. were pagans. In Table 14 the totals for each religion are brought together for all censuses since Confederation. Further analyses showing the percentages of specified religions at each census, 1871-1931, and the numbers accredited to each specified religion, by provinces, were given at pp. 127-129 of the 1934-35 Year Book.

14.—Religions of the People at each Decennial Census, 1871-1931.

Religion.	1871. ¹	1881.	1891.	1901.	1911.	1921.	1931.
Adventist.....	6,179	7,211	6,354	8,058	10,406	14,179	16,026
Anglican.....	494,049	574,818	646,059	681,494	1,043,017	1,407,780	1,635,615
Baptist ²	239,343 ³	296,525 ³	303,839 ³	318,005	382,720	421,730	443,341
Brethren.....	2,305	8,831	11,637	8,014	9,278	11,580	13,472
Buddhist.....	—	—	—	10,407	10,012	11,281	15,784
Christian.....	—	—	—	7,484	17,421	17,142	11,527
Christian Science.....	—	—	—	2,619	5,073	13,826	18,436
Church of Christ, Disciples...	—	20,193	12,763	17,164	14,554	13,107	15,811
Confucian.....	—	—	—	5,115	14,562	27,114	24,087
Congregationalist.....	21,829	26,900	28,157	28,293	34,054	30,730	694 ⁴
Doukhobor.....	—	—	—	8,775	10,493	12,648	14,913
Evangelical Association.....	—	—	—	10,193	10,595	13,905	22,213
Friends (Quaker).....	7,345	6,553	4,650	4,100	4,027	3,149	2,424
Greek Church.....	—	—	—	15,630	88,507	169,832	5
Greek Orthodox.....	—	—	—	—	—	—	102,389 ⁵
Holiness Movement.....	—	—	—	2,775	3,856	3,245	4,436
International Bible Students..	—	—	—	99	925	6,678	13,552
Jewish.....	1,115	2,393	6,414	16,401	74,564	125,197	155,614
Lutheran.....	37,935	46,350	63,982	92,524	229,864	286,458	394,194

For footnotes, see end of table, p. 140.

14.—Religions of the People at each Decennial Census, 1871-1931—concluded.

Religion.	1871. ¹	1881.	1891.	1901.	1911.	1921.	1931.
Mennonite (incl. Hutterite)...	3	3	3	31,797	44,625	58,797	88,736
Methodist.....	567,091	742,981	847,765	916,886	1,079,993	1,159,246	4
Mormon.....	—	—	—	6,891	15,971	19,622	22,005
No religion.....	5,146	2,634	6	4,810	26,027	21,739	21,071
Pagan.....	1,886	4,478	6	15,107	11,840	6,778	5,008
Pentecostal.....	—	—	—	—	513	7,003	26,301
Plymouth Brethren.....	—	—	—	3,040	3,438	6,482	6,983
Presbyterian.....	544,998	676,165	755,326	842,531	1,116,071	1,409,406	870,728 ⁴
Protestant.....	10,146	6,519	12,253	11,612	30,265	30,753	23,296
Roman Catholic.....	1,492,029	1,791,982	1,992,017	2,229,600	2,833,041	3,389,626	4,285,388 ⁷
Salvation Army.....	—	—	13,949	10,308	18,834	24,733	30,716
Unitarian.....	2,275	2,126	1,777	1,934	3,224	4,926	4,445
United Church.....	—	—	—	—	—	8,728 ⁴	2,017,375 ⁴
All other (various).....	35,035	21,382	46,030	16,427	26,383	31,270	54,164
Not given.....	17,055	86,769	80,267	43,222	32,490	19,259	16,042
Totals.....	3,485,761	4,324,810	4,833,239	5,371,315	7,206,643	8,787,949	10,376,786

¹ The figures for 1871 cover the four original provinces of Canada only.² Including Tunkers.³ Mennonites were included with Baptists prior to 1901.⁴ Practically all Methodists and Congregationalists and a large number of Presbyterians united to form the United Church of Canada in 1925, although a relatively small number reported themselves as "United Church" in 1921, chiefly in Western Canada where the movement towards union began.⁵ In earlier censuses only small numbers were involved, and Greek Catholics and Greek Orthodox were included under the general term "Greek Church". A rapid increase of both Greek Catholics and Greek Orthodox has been shown for recent censuses and, since the former owe obedience to the Pope in matters of faith, they have been included with the Roman Catholics for 1931.⁶ Included with "All other" religions for 1891.⁷ Including 186,654 Greek Catholics (see footnote 5).

In 1931, for the first time in the history of the Dominion Census, the religions of the people were cross-classified according to racial origin. The results, for Canada as a whole, were shown at pp. 116-117 of the 1936 Year Book.

Section 7.—Birthplaces.

The birthplaces of the population of Canada, as at each of the seven censuses, are shown by Canadian born, other British born, and foreign born (United States born and other foreign born), in Table 15. The table shows that, in 1871, 97·28 p.c. of the population was born under the British flag, while sixty years later the percentage had declined to 89·18. The proportion of Canadian born increased steadily until the opening of the century, but has declined as a result of the increase of immigration after 1900. The Census of 1931 showed declines in the proportions of other British born and United States born as compared with 1921 but an increase in the percentage of other foreign born; the proportion of Canadian born has remained practically unchanged.

Worthy of note is the fairly steady increase of population born in the United States from 1·85 p.c. in 1871 to 4·25 p.c. in 1921, and the subsequent decline to 3·32 p.c. in 1931. Other foreign born increased from 0·87 p.c. in 1871 to 6·23 p.c. in 1911, declined to 5·87 p.c. of the total population by 1921 but, as already noted, increased substantially to 7·50 p.c. by 1931.

**15.—Birthplaces of the Population of Canada, by Numbers and Percentages,
According to the Censuses of 1871-1931.**

Year.	Canadian Born.	Other British Born. ¹	Foreign Born.		Total Popula- tion.	Percentages of Total Population.			
			Born in United States.	Born in other Foreign Countries.		Canadian Born.	Other British Born.	Foreign Born.	
								Born in United States.	Other Foreign Born.
	No.	No.	No.	No.	No.	p.c.	p.c.	p.c.	p.c.
1871....	2,894,591	496,502	64,447	30,221	3,485,761	83.04	14.24	1.85	0.87
1881....	3,721,826	478,615	77,753	46,616	4,324,810	86.06	11.07	1.80	1.08
1891....	4,189,368	490,573	80,915	72,383	4,833,239	86.68	10.15	1.67	1.50
1901....	4,671,815	421,051	127,899	150,550	5,371,315	86.98	7.84	2.38	2.80
1911....	5,619,682	834,229	303,680	449,052	7,206,643	77.98	11.58	4.21	6.23
1921....	6,832,224	1,065,448	374,022	516,255	8,787,949	77.75	12.13	4.25	5.87
1931....	8,069,261	1,184,830	344,574	778,121	10,376,786	77.76	11.42	3.32	7.50

¹ Includes some hundreds of persons born at sea.

The birthplaces of the 1931 population were tabulated for the various provinces and territories, by sex, at p. 118 of the 1936 Year Book. In the Maritime Provinces, the population is shown by the Census of 1931 to be about 93 p.c. native born, and in Quebec about 91 p.c. In Ontario, however, the proportion sinks to about 77 p.c., in Manitoba to about 66 p.c., in Saskatchewan to about 65 p.c., in Alberta to about 58 p.c., and in British Columbia to about 54 p.c.

At pp. 133-140, inclusive, of the 1934-35 Year Book, a very complete analysis was given of the birthplaces of the Canadian people. Tables there published show: population classified by province of residence and province of birth; population, for each province, classified by nativity of parents; Canadian born classified according to nativity of parents, by racial origin; and rural and urban population, other than Canadian born, classified according to year of arrival in Canada.

Section 8.—Citizenship and Naturalization.

At the latest four decennial censuses, those of 1901, 1911, 1921, and 1931, inquiry has been made into the citizenship of the foreign-born population. The relevant instructions given to enumerators at the Census of 1931 were published at p. 141 of the 1934-35 Year Book.

Table 16 deals with the citizenship of the Canadian born, the British born, and the foreign born of the population residing in Canada at the date of the Census of 1931. As regards the total (8,069,261) native-born population, 8,052,459 were "Canadian Nationals" and were made up of 8,051,142 persons with uninterrupted citizenship and 1,317 naturalized repatriates. Of the total native born resident in Canada at the date of the census, 16,802 were aliens owing their allegiance to some foreign country—in the case of females usually as a result of marriage. The table on p. 142 of the 1934-35 Year Book showed the country to which allegiance was owed by these 16,802 Canadian-born aliens.

In the case of British born, 11.4 p.c. had not yet acquired Canadian domicile and of the foreign born 45.2 p.c. were still aliens. A more detailed analysis than that given below will be found at p. 143 of the 1934-35 Year Book.

16.—Citizenship of Native-Born, Other British-Born, and Foreign-Born Residents in Canada in 1931, by Sex, According to Allegiance.

Nationality.	NATIVE BORN.			Nationality.	OTHER BRITISH BORN.		
	Total.	Male.	Female.		Total.	Male.	Female.
Canadian-born nationals—Totals.....	8,052,459	4,074,715	3,977,744	British-born Canadian nationals.....	1,044,791	556,043	488,748
With uninterrupted citizenship.....	8,051,142	4,074,053	3,977,089	By domicile.....	1,042,781	555,062	487,719
Repatriated and naturalized.....	1,317	662	655	By repatriation and naturalization....	2,010	981	1,029
Canadian-born aliens (by renunciation or marriage).....	16,802	1,286	15,516	British born without acquired domicile.	135,426	74,687	60,739
Owing allegiance to:—				British-born aliens (by renunciation or marriage).....	4,613	681	3,932
European countries ¹ ..	5,991	92	5,899	Owing allegiance to:—			
Asiatic countries.....	286	20	266	European countries ¹	1,625	154	1,471
United States.....	10,477	1,170	9,307	Asiatic countries...	32	6	26
Other countries.....	48	4	44	United States.....	2,914	506	2,408
Totals, Canadian Born.....	8,069,261	4,076,001	3,993,260	Totals, Other British Born.....	1,184,830	631,411	553,419

Nationality.	FOREIGN BORN.									
	Total. ²	Continental European Born.			Born in Asia.			United States Born.		
		Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.
Canadian nationals.	614,971	351,013	197,043	153,970	12,119	7,826	4,293	249,595	118,104	131,491
Aliens.....	507,724	363,449	241,140	122,309	48,489	44,349	4,140	94,979	57,036	37,943
European ³	363,754	358,198	238,366	119,832	330	179	151	4,822	1,991	2,831
Asiatic.....	48,072	63	18	45	47,935	44,047	3,888	64	27	37
United States....	94,984	4,726	2,447	2,279	102	53	49	90,069	55,009	35,060
Other.....	914	462	309	153	122	70	52	24	9	15
Totals, Foreign Born...	1,122,695	714,462	438,183	276,279	60,608	52,175	8,433	344,574	175,140	169,434

¹ The European country of allegiance was given on p. 142 of the 1934-35 Year Book.

² This column includes foreign-born persons born in places other than continental Europe, Asia, or the United States.

³ The European country of allegiance was given at p. 143 of the 1934-35 Year Book.

The Progress of Naturalization.—The foreign-born residents of Canada numbered 1,122,695 in 1931 as compared with 890,277 in 1921, 752,732 in 1911, and 278,449 in 1901; among these the naturalized numbered 614,971 in 1931, 514,179 in 1921, 344,557 in 1911, and 153,908 in 1901, or 54·78 p.c., 57·75 p.c., 45·77 p.c., and 55·27 p.c., respectively. Alien residents in Canada showed an absolute decline

between 1911 and 1921 of from 408,175 to 376,098, *i.e.*, from 5.66 p.c. of the population to 4.28 p.c. Between 1921 and 1931, they increased to 507,724, or 4.89 p.c. of the 1931 population. Among the foreign-born residents of Canada, the United States born exceeded those born in any other country, although by continental groups the Europeans were more numerous. Between 1921 and 1931 the U.S. born declined from 374,022 to 344,574, but there was a substantial net increase in the total foreign born due to the large increase of Europeans. On the other hand, the percentage of the U.S. born who were naturalized to total U.S. born increased from 63.63 in 1921 to 72.44 in 1931, whereas the percentage of continental Europeans who were naturalized fell from 57.88 in 1921 to 49.13 in 1931.

Section 9.—Language Spoken and Mother Tongue.

Official Languages.—In the Census of 1931, 1,322,370 persons were reported as speaking both the official languages of Canada, 6,999,913 speaking English, 1,779,338 speaking French and 275,165 as unable to speak either English or French. In a table on p. 121 of the 1936 Year Book the population was classified by racial origins and as able to speak one, both, or neither of the official languages.

Mother Tongue.—At p. 122 of the 1936 Year Book will be found a table showing the mother tongue of the population, by provinces and for the Dominion.

Section 10.—Rural and Urban Population.

For the purposes of the census the population residing in cities, towns, and incorporated villages has been defined as urban, and that outside of such localities as rural. Thus the distinction here made between 'rural' and 'urban' population is a distinction of provincial legal status rather than of size of aggregations of population within limited areas. Since the laws of the various provinces differ in regard to the population necessary before a municipality may be incorporated as urban (the laws of Saskatchewan, for example, making provision that 50 people actually resident on an area not greater than 640 acres may claim incorporation as a village, while the Ontario law now requires that villages asking for incorporation shall have a population of 750 on an area not exceeding 500 acres), the line of demarcation between rural and urban population is not at all uniformly drawn throughout the Dominion, as far as comparable aggregations of population are concerned.

A table published at p. 147 of the 1934-35 Year Book gives the rural and urban populations, by provinces and sex, and divides the incorporated urban centres into two groups, *viz.*, under one thousand, and one thousand and over, thereby allowing a closer comparison than is possible from Table 17. The population in urban places having less than one thousand was shown to have decreased for the whole of Canada but increased in Prince Edward Island, Nova Scotia, and British Columbia. In Table 17 are given statistics showing the growth of rural and urban population, respectively, by provinces, since 1891. To a limited extent Table 18 will permit the student of population statistics to make, at least for Canada as a whole, his own line of demarcation between rural and urban populations.*

* In the United States, urban population, prior to 1930, was classified by the Census Bureau as that residing in cities and other incorporated places having 2,500 inhabitants or more with certain minor qualifications, but in 1930 the definition was slightly modified to include townships and other political divisions, not incorporated as municipalities, having a total population of 10,000 or more each, and a population density of 1,000 or more per square mile. The direct result of this modification has been to increase slightly the proportion of urban population.

While a summary comparison between urbanization in Canada in 1931 and in the United States in 1930 would lead us to the conclusion that our country, though far less densely peopled than the United States, had an almost equally large percentage of its population in urban communities, *viz.*, 53·70 p.c. in Canada as compared with 56·2 p.c. in the United States, the fact that in the United States, inhabitants of places having under 2,500 population are included with rural population must be taken into account. A fairer basis of comparison is secured if the same population limits are taken for both countries, as may be done by using Table 18. Thus, at the Census of 1930, the United States had 29·5 p.c. of its population resident in cities of 100,000 and over, while Canada in 1931 had only 22·44 p.c. of its population in such places. The United States had an additional 18 p.c. of its population residing in cities of between 10,000 and 100,000 population, and 4·8 p.c. in cities and towns of 5,000 to 10,000, while Canada had in cities of these categories only 14·87 p.c. and 4·42 p.c., respectively, of its population. Thus, taking all places of 5,000 and over—the lowest population for which comparative figures are readily available—52·3 p.c. of the population of the United States resided in such places as compared with 41·73 p.c. of the population of Canada, showing the much higher degree of urbanization which has been reached in the United States—a natural thing in an older settled and more densely peopled country.

On the basis of the census classification, it is apparent from Table 17 that in the decade 1921-31, as in the previous one, urban communities absorbed nearly 77 p.c. of the total increase in population, with the result that the urban population of Canada in 1931 exceeded the rural by 767,330. Out of every 1,000 persons in the country, 463 were resident, on June 1, 1931, in rural and 537 in urban communities, as compared with 505 in rural and 495 in urban communities on June 1, 1921; 546 in rural and 454 in urban communities in 1911; 625 in rural and 375 in urban communities in 1901; and 682 in rural and 318 in urban communities in 1891.

From Table 18, showing the distribution of urban population in Canada by size of cities and towns, it is seen that Canada possessed, in 1931, two cities of more than half a million population. These are Montreal and Toronto, with 818,577 and 631,207 inhabitants, respectively. Two other cities, Vancouver and Winnipeg, have attained the 200,000 mark and Hamilton, Quebec, and Ottawa each have populations of over 100,000. The two western cities of Calgary and Edmonton are now in the 75,000 to 100,000 class. In this respect London, which excelled Edmonton in 1921, now takes the next lower place with a population of 71,148. Details of the population of these and other smaller cities and towns of 5,000 and over, are given by censuses from 1871 to 1931 in Table 19, while the populations of urban communities having, in 1931, a population of from 1,000 to 5,000 each, are given for 1901, 1911, 1921, and 1931 in Table 20.

All the larger cities have in their neighbourhoods growing "satellite" towns or other densely settled areas in close economic relationship with the central municipality. This phenomenon is to-day of increasing importance largely as a result of the greater ease and speed of transportation by motor vehicle. It has, therefore, been considered advisable to calculate the total populations resident in what the United States census authorities call the "metropolitan districts". On this basis the total

populations of the larger cities at the Census of 1931 were as follows: 'Greater Montreal', 1,000,159; 'Greater Toronto', 808,864; 'Greater Vancouver', 308,340; 'Greater Winnipeg', 280,202; 'Greater Ottawa' (including Hull), 175,988; 'Greater Quebec', 166,435; 'Greater Hamilton', 163,710; 'Greater Windsor', 110,385; 'Greater Halifax', 74,161; and 'Greater Saint John', 55,611.*

*See 1931 Census Monograph No. 6, *The Rural and Urban Composition of the Canadian Population*, by S. A. Cudmore and H. G. Caldwell.

17.—Rural and Urban Populations, by Provinces and Territories, Decennial Censuses 1871-1931 and Numerical Increases 1921-31.

Province or Territory.	1871.		1881.		1891.		1901.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
P. E. Island.....	86,149	7,872	95,693	13,198	94,823	14,255	88,304	14,955
Nova Scotia.....	355,718	32,082	377,030	63,542	373,403	76,993	330,191	129,383
New Brunswick...	235,381	50,213	262,141	59,092	272,362	48,901 ¹	253,835	77,285
Quebec.....	919,665	271,851	980,515	378,512	988,820	499,715	994,833	654,065
Ontario.....	1,264,854	355,997	1,351,074	575,848	1,295,323	818,998	1,246,969	935,978
Manitoba.....	24,170	1,058	52,015	10,245	111,498	41,008	184,775 ²	70,436 ²
Saskatchewan.....	3	—	3	—	3	—	77,013 ⁴	14,266 ⁴
Alberta.....	3	—	3	—	3	—	54,489	18,533
British Columbia..	32,977	3,270	40,389	9,070	60,945	37,228	88,478	90,179
Yukon.....	3	—	3	—	3	—	18,077	9,142
N.W.T.....	3	—	3	—	3	—	20,129	—
Royal Canadian Navy.....	—	—	—	—	—	—	—	—
Canada.....	2,966,914³	722,343	3,215,303³	1,109,507	3,296,141³	1,537,098	3,357,093	2,014,222

Province or Territory.	1911.		1921.		1931.		Numerical Increases in Decade 1921-31.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
P. E. Island.....	78,758	14,970	69,522	19,093	67,653	20,385	-1,869	1,292
Nova Scotia.....	306,210	186,128	296,799	227,038	281,192	231,654	-15,607	4,616
New Brunswick...	252,342	99,547	263,432	124,444	279,279	128,940	15,847	4,496
Quebec.....	1,038,934 ⁵	966,842 ⁵	1,038,096	1,322,569	1,060,649	1,813,606	22,553	491,037
Ontario.....	1,198,803 ⁶	1,328,489	1,227,030	1,706,632	1,335,691	2,095,992	108,661	389,360
Manitoba.....	261,029 ⁶	200,365	348,502	261,616	384,170	315,969	35,668	54,353
Saskatchewan.....	361,037 ⁴	131,395 ⁴	538,552	218,958	630,880	290,905	92,328	71,947
Alberta.....	236,633 ⁷	137,662 ⁷	365,550	222,904	453,097	278,508	87,547	55,604
British Columbia..	188,796	203,684	277,020	247,562	299,524	394,739 ⁸	22,504	147,177
Yukon.....	4,647	3,865	2,851	1,306	2,870	1,360	19	54
N.W.T.....	6,507 ⁹	—	7,988	—	9,723	—	1,735	—
Royal Canadian Navy.....	—	—	485	—	—	—	—	—
Canada.....	3,933,696	3,272,947	4,435,827	4,352,122	4,804,728	5,572,058	368,901	1,219,936

¹ Some of the towns of 1891 were included with rural.

² As corrected in Census Report, Prairie Provinces, 1916.

³ The populations (48,000, 56,446 and 98,967, respectively) in territory now comprised in the provinces of Alberta and Saskatchewan and in Yukon and the Northwest Territories was classified as rural in the Censuses of 1871, 1881, and 1891.

⁴ Urban and rural populations for 1911 and 1901 are as corrected in Census Report, Prairie Provinces, 1916.

⁵ The urban population of 970,791, shown in Vol. I, Census 1911, is reduced to 966,842 by the transfer of the populations of Maniwaki, Martinville, Moisie, St. Bruno, St. Martin and St-Vincent de Paul from urban to rural; by adjustments in area of the villages of St. Anne and Ste. Geneviève; and Extension of Boundaries Act, 1912.

⁶ As changed by Extension of Boundaries Act, 1912.

⁷ Vol. I, Census 1911, places the urban population of Alberta for that year at 141,937. Included in this figure was the population (5,250) of twelve places which, according to the Report of the Municipal Commissioner for Alberta, were not then incorporated. The places so included were Aetna, Banff, Bankhead, Bellevue, Bickerdike, Canmore, Cardiff, Exshaw, Hillcrest, Passburg, Queenston and Elmpark. The correction resulting from this and from other small adjustments consequent upon more definite knowledge as to incorporated areas, places the urban population for 1911 at 137,662. Similar corrections have been made in the urban and rural figures for the Census of 1901.

⁸ This includes South Vancouver and Point Grey, with 1921 populations of 32,267 and 13,736, respectively, which were then classified as 'rural'.

⁹ Members of the Royal Canadian Navy were counted at their homes in the Census of 1931.

18.—Urban Populations, Classified by Size of Municipality Groups, 1911, 1921, and 1931.

In Cities, Towns, or Villages of—	1911.			1921.			1931.		
	Number of Places.	Popula- tion.	Per Cent of Total Pop.	Number of Places.	Popula- tion.	Per Cent of Total Pop.	Number of Places.	Popula- tion.	Per Cent of Total Pop.
Over 500,000.....	Nil	—	—	2	1,140,899	12·98	2	1,449,784	13·97
Between—									
400,000 and 500,000	1	490,504	6·81	Nil	—	—	Nil	—	—
300,000 and 400,000	1	381,833	5·30	Nil	—	—	Nil	—	—
200,000 and 300,000	Nil	—	—	Nil	—	—	2	465,378	4·48
100,000 and 200,000	2	236,436	3·28	4	518,298	5·90	3	413,013	3·98
50,000 and 100,000	3	247,221	3·43	5	336,650	3·83	7	470,443	4·53
25,000 and 50,000	7	272,071	3·78	7	239,096	2·72	10	339,521	3·27
15,000 and 25,000	11	193,977	2·69	19	370,990	4·22	23	457,292	4·41
10,000 and 15,000	18	225,423	3·13	18	224,033	2·55	23	275,944	2·66
5,000 and 10,000	44	313,100	4·34	54	382,762	4·36	68	458,784	4·42
3,000 and 5,000	59	222,274	3·08	72	272,720	3·10	71	273,276	2·63
1,000 and 3,000	250	428,250	5·94	293	492,116	5·60	324	557,466	5·37
500 and 1,000	241	174,781	2·43	290	215,648	2·45	322	231,375	2·23
Under 500.....	419	87,077	1·21	679	159,410	1·81	750	179,782	1·73
Totals.....	1,056	3,272,947	45·42	1,443	4,352,122	49·52	1,605	5,572,058	53·70

Population is shown in Table 18 to be increasingly attracted to the larger cities. Thus, not only have cities of over 500,000 population (Montreal and Toronto) increased their proportions to the total, but cities of from 100,000 to 500,000 have increased their aggregate population from 5·90 p.c. of the total to 8·46 p.c., and cities of between 5,000 and 100,000 from 17·68 p.c. to 19·29 p.c. in the decade 1921-31. As will be seen, the large absolute increases in the total population of municipalities of less than 1,000 persons for 1921 and 1931 were due almost entirely to the addition of newly incorporated places.*

See also reference in text footnote () at top of p. 145.

19.—Populations of Cities and Towns having over 5,000 Inhabitants, Decennial Censuses 1871-1931 and the Quinquennial Census of 1936.¹

NOTE.—The cities and towns in which a Board of Trade exists are indicated by an asterisk (*), and those in which there is a Chamber of Commerce by a dagger (†). In all cases the populations for previous censuses have been rearranged as far as possible to cover the same area as in 1931.

City or Town.	Province.	Populations.							
		1871.	1881.	1891.	1901.	1911.	1921.	1931.	1936. ¹
*Montreal.....	Que.....	130,833	177,377	256,723	328,172	490,504	618,506	818,577	—
*Toronto.....	Ont.....	59,000	96,196	181,215	209,892	381,833	521,893	631,207	—
*Vancouver.....	B.C.....	—	—	13,709	29,432	120,847	163,220	246,593	—
*Winnipeg.....	Man.....	241	7,985	25,639	42,340	136,035	179,087	218,785	215,814
†Hamilton.....	Ont.....	26,880	36,661	48,959	52,634	81,969	114,151	155,547	—
*Quebec.....	Que.....	59,699	62,446	63,090	68,840	78,710	95,193	130,594	—
*Ottawa.....	Ont.....	24,141	31,307	44,154	59,928	87,062	107,843	126,872	—
*Calgary.....	Alta.....	—	—	3,876	4,392	43,704	63,305	83,761	83,407
†Edmonton.....	Alta.....	—	—	—	4,176	31,064	58,821	79,197	85,774
†London.....	Ont.....	18,000	27,867	31,977	37,976	46,300	60,959	71,148	—
†Windsor.....	Ont.....	4,253	6,561	10,322	12,153	17,829	38,591	63,108	—
†Verdun.....	Que.....	—	278	296	1,898	11,629	25,001	60,745	—
*Halifax.....	N.S.....	29,582	36,100	38,437	40,832	46,619	58,372	59,275	—
*Regina.....	Sask.....	—	—	—	2,249	30,213	34,432	53,209	53,354
*Saint John.....	N.B.....	41,325	41,353	39,179	40,711	42,511	47,166	47,514	—
*Saskatoon.....	Sask.....	—	—	—	113	12,004	25,739	43,291	41,734
†Victoria.....	B.C.....	3,270	5,925	16,841	20,919	31,660	38,227	39,082	—
†Three Rivers.....	Que.....	7,570	8,670	8,334	9,981	13,691	22,367	35,450	—
*Kitchener.....	Ont.....	2,743	4,054	7,425	9,747	15,196	21,763	30,793	—
*Brantford.....	Ont.....	8,107	9,616	12,753	16,619	23,132	29,440	30,107	—
†Hull.....	Que.....	3,800	6,890	11,264	13,993	18,222	24,117	29,433	—
†Sherbrooke.....	Que.....	4,432	7,227	10,097	11,765	16,405	23,515	28,933	—
†Outremont.....	Que.....	—	387	795	1,148	4,820	13,249	28,641	—
†Fort William.....	Ont.....	—	690	2,176	3,633	16,499	20,541	26,277	—
†St. Catharines.....	Ont.....	7,864	9,631	9,170	9,946	12,484	19,881	24,753	—
Westmount.....	Que.....	200	884	3,076	8,856	14,579	17,593	24,235	—
†Kingston.....	Ont.....	12,407	14,091	19,263	17,961	18,874	21,753	23,439	—

¹ The 1936 figures cover cities and towns of the Prairie Provinces only.

19.—Populations of Cities and Towns having over 5,000 Inhabitants, Decennial Censuses 1871-1931 and the Quinquennial Census of 1936¹—continued.

City or Town.	Province.	Populations.							
		1871.	1881.	1891.	1901.	1911.	1921.	1931.	1936. ¹
†Oshawa.....	Ont.....	3,185	3,992	4,066	4,394	7,436	11,940	23,439	-
*Sydney.....	N.S.....	1,700	2,180	2,427	9,909	17,723	22,545	23,089	-
*Sault Ste. Marie.....	Ont.....	879	780	2,414	7,169	14,920	21,092	23,082	-
†Peterborough.....	Ont.....	4,611	6,812	9,717	12,886	18,360	20,994	22,327	-
*Moose Jaw.....	Sask.....	-	-	-	1,558	13,823	19,285	21,299	19,805
*Guelph.....	Ont.....	6,878	9,890	10,537	11,496	15,175	18,128	21,075	-
*Gloucester.....	N.S.....	-	-	2,459	6,945	16,562	17,007	20,706	-
*Moncton.....	N.B.....	600	5,032	8,762	9,026	11,345	17,488	20,689	-
†Port Arthur.....	Ont.....	-	1,275	2,698	3,214	11,220	14,886	19,818	-
†Niagara Falls.....	Ont.....	1,610	2,347	3,349	5,702	9,248	14,764	19,046	-
†Lachine.....	Que.....	2,689	3,248	4,819	6,365	11,688	15,404	18,630	-
*Sudbury.....	Ont.....	-	-	-	2,027	4,150	8,621	18,518	-
†Sarnia.....	Ont.....	2,929	3,874	6,692	8,176	9,947	14,877	18,191	-
*Stratford.....	Ont.....	4,313	8,239	9,500	9,959	12,946	16,094	17,742	-
*New Westminster.....	B.C.....	-	1,500	6,678	6,499	13,199	14,495	17,524	-
*Brandon.....	Man.....	-	-	3,778	5,620	13,839	15,397	17,082	16,461
*St. Boniface.....	Man.....	817	1,283	1,553	2,019	7,483	12,821	16,305	16,275
*North Bay.....	Ont.....	-	-	1,848	2,530	7,737	10,692	15,528	-
†St. Thomas.....	Ont.....	2,197	8,367	10,366	11,485	14,054	16,026	15,430	-
†Shawinigan Falls.....	Que.....	-	-	-	-	4,265	10,625	15,345	-
*Chatham.....	Ont.....	5,873	7,873	9,052	9,068	10,770	13,256	14,569	-
†East Windsor.....	Ont.....	-	-	-	-	-	5,870	14,251	-
*Timmins.....	Ont.....	-	-	-	-	-	3,843	14,200	-
*Galt.....	Ont.....	3,827	5,187	7,535	7,866	10,299	13,216	14,006	-
†Belleville.....	Ont.....	7,305	9,516	9,916	9,117	9,876	12,206	13,790	-
*Lethbridge.....	Alta.....	-	-	-	2,072	9,035	11,097	13,489	13,523
†St. Hyacinthe.....	Que.....	3,746	5,321	7,016	9,210	9,797	10,859	13,448	-
*Owen Sound.....	Ont.....	3,369	4,426	7,497	8,776	12,558	12,190	12,839	-
†Chicoutimi.....	P.E.I.....	7,872	10,345	10,098	10,718	9,883	10,814	12,361	-
†Chicoutimi.....	Que.....	1,393	1,935	2,277	3,826	5,880	8,937	11,877	-
†Lévis.....	Que.....	8,052	8,734	8,797	9,242	8,703	10,470	11,724	-
*Valleyfield (Sala- berry de).....	Que.....	1,800	3,906	5,515	11,055	9,449	9,215	11,411	-
*Woodstock.....	Ont.....	3,982	5,373	8,612	8,833	9,320	9,935	11,395	-
*St. Jean.....	Que.....	3,022	4,314	4,722	4,030	5,903	7,734	11,256	-
*Cornwall.....	Ont.....	2,033	4,468	6,805	6,704	6,598	7,419	11,126	-
†Joliette.....	Que.....	3,047	3,268	3,372	4,220	6,346	9,039	10,765	-
†Sandwich.....	Ont.....	1,160	1,143	1,352	1,450	2,302	4,415	10,715	-
*Welland.....	Ont.....	1,110	1,870	2,035	1,863	5,318	8,654	10,709	-
Thetford Mines.....	Que.....	-	-	-	3,256	7,261	8,272	10,701	-
*Granby.....	Que.....	876	1,040	1,710	3,773	4,750	6,785	10,587	-
†Sorel.....	Que.....	5,636	5,791	6,669	7,057	8,420	8,174	10,320	-
†Medicine Hat.....	Alta.....	-	-	-	1,570	5,608	9,634	10,300	9,592
†Walkerville.....	Ont.....	-	-	933	1,595	3,302	7,059	10,105	-
*Prince Albert.....	Sask.....	-	-	-	1,785	6,254	7,352	9,905	11,049
†Brookville.....	Ont.....	5,102	7,609	8,791	8,940	9,374	10,043	9,736	-
Jonquière.....	Que.....	-	-	-	-	2,354	4,851	9,448	-
†Pembroke.....	Ont.....	1,508	2,820	4,401	5,156	5,626	7,875	9,368	-
*Dartmouth.....	N.S.....	2,191	3,786	6,252	4,806	5,058	7,899	9,100	-
†St. Jérôme.....	Que.....	1,159	2,032	2,868	3,619	3,473	5,491	8,967	-
*New Glasgow.....	N.S.....	1,676	2,595	3,776	4,447	6,383	8,974	8,858	-
*Fredericton.....	N.B.....	6,006	6,218	6,502	7,117	7,208	8,114	8,830	-
Cap de la Madeleine	Que.....	-	-	-	-	-	6,738	8,748	-
North Vancouver.....	B.C.....	-	-	-	365	8,196	7,652	8,510	-
†Rivière du Loup.....	Que.....	1,541	2,291	4,175	4,569	6,774	7,703	8,499	-
*Orillia.....	Ont.....	1,322	2,910	4,752	4,907	6,823	7,631	8,183	-
*Waterloo.....	Ont.....	1,594	2,066	2,941	3,537	4,359	5,883	8,095	-
*Turco.....	N.S.....	2,114	3,461	5,102	5,993	6,107	7,562	7,901	-
†La Tuque.....	Que.....	-	-	-	-	2,934	5,603	7,871	-
*Barrie.....	Ont.....	3,398	4,854	5,550	5,949	6,420	6,936	7,776	-
*Sydney Mines.....	N.S.....	1,494	2,340	2,442	3,191	7,470	8,327	7,769	-
*New Waterford.....	N.S.....	-	-	-	-	-	5,615	7,745	-
*Trail.....	B.C.....	-	-	-	1,360	1,460	3,020	7,573	-
*Lindsay.....	Ont.....	4,049	5,080	6,081	7,003	6,964	7,620	7,505	-
*Amherst.....	N.S.....	1,839	2,274	3,781	4,964	8,973	9,998	7,450	-
New Toronto.....	Ont.....	-	-	-	209	686	2,669	7,146	-
†Smiths Falls.....	Ont.....	1,150	2,087	3,864	5,155	6,370	6,790	7,108	-
Launson.....	Que.....	2,827	4,578	4,391	4,267	4,982	6,428	7,084	-
*Yarmouth.....	N.S.....	4,696	5,324	6,089	6,430	6,600	7,073	7,055	-
†Midland.....	Ont.....	-	1,095	2,088	3,174	4,663	7,016	6,920	-
Mimico.....	Ont.....	-	-	-	437	1,373	3,751	6,800	-

¹ The 1936 figures cover cities and towns of the Prairie Provinces only.

19.—Populations of Cities and Towns having over 5,000 Inhabitants, Decennial Censuses 1871-1931 and the Quinquennial Census of 1936¹—concluded.

City or Town.	Province.	Populations.							
		1871.	1881.	1891.	1901.	1911.	1921.	1931.	1936. ¹
*Kenora.....	Ont.....	-	-	1,806	5,202	6,158	5,407	6,766	-
*Nanaimo.....	B.C.....	-	1,645	4,595	6,130	6,254	6,559	6,745	-
Eastview.....	Ont.....	-	-	-	-	3,169	5,324	6,686	-
†Drummondville.....	Que.....	-	900	1,955	1,450	1,725	2,852	6,609	-
*Portage la Prairie.....	Man.....	-	-	3,363	3,901	5,892	6,766	6,597	6,538
*Campbellton.....	N.B.....	-	-	1,782	2,652	3,817	5,570	6,505	-
†Port Colborne.....	Ont.....	988	1,716	1,154	1,253	1,624	3,415	6,503	-
*Grand Mère.....	Que.....	-	-	-	2,511	4,783	7,631	6,461	-
*Edmundston.....	N.B.....	-	-	-	-	1,821	4,035	6,430	-
*Springhill.....	N.S.....	-	900	4,813	4,559	5,713	5,681	6,355	-
†Prince Rupert.....	B.C.....	-	-	-	-	4,184	6,393	6,350	-
*Magog.....	Que.....	-	-	2,100	3,516	3,978	5,159	6,302	-
*Preston.....	Ont.....	1,408	1,419	1,843	2,308	3,883	5,423	6,280	-
†Trenton.....	Ont.....	1,796	3,042	4,363	4,217	3,988	5,902	6,276	-
†Victoriaville.....	Que.....	1,425	1,474	1,300	1,693	3,028	3,759	6,213	-
*Kamloops.....	B.C.....	-	-	-	-	3,772	4,501	6,167	-
*North Sydney.....	N.S.....	1,200	1,520	2,513	4,646	5,418	6,585	6,139	-
*St. Lambert.....	Que.....	327	332	906	1,362	3,344	3,890	6,075	-
*Nelson.....	B.C.....	-	-	-	5,273	4,476	5,230	5,992	-
*North Battleford.....	Sask.....	-	-	-	-	2,105	4,108	5,986	4,719
†Cobourg.....	Ont.....	4,442	4,957	4,829	4,239	5,074	5,327	5,834	-
*Collingwood.....	Ont.....	2,829	4,445	4,939	5,755	7,090	5,882	5,809	-
Transcona.....	Man.....	-	-	-	-	-	4,185	5,747	5,578
†Rimouski.....	Que.....	1,186	1,417	1,429	1,804	3,097	3,612	5,589	-
†Brampton.....	Ont.....	2,090	2,920	3,252	2,748	3,412	4,527	5,532	-
*Fort Frances.....	Ont.....	-	-	1,339	1,163	1,611	3,109	5,470	-
Longueuil.....	Que.....	2,083	2,355	2,757	2,835	3,972	4,682	5,407	-
St. Laurent.....	Que.....	-	-	1,184	1,390	1,860	3,232	5,348	-
*Renfrew.....	Ont.....	865	1,605	2,611	3,153	3,846	4,906	5,296	-
*Swift Current.....	Sask.....	-	-	-	121	1,852	3,518	5,296	5,074
†Ingersoll.....	Ont.....	4,022	4,318	4,191	4,573	4,763	5,150	5,233	-
†Simcoe.....	Ont.....	1,856	2,645	2,674	2,627	3,227	3,953	5,226	-
Forest Hill (vil- lage).....	Ont.....	-	-	-	-	-	-	5,207	-
*Hawkesbury.....	Ont.....	1,671	1,920	2,042	4,150	4,400	5,544	5,177	-
†Thord.....	Ont.....	1,635	2,456	2,703	1,979	2,273	4,825	5,092	-
†Whitby.....	Ont.....	2,732	3,140	2,786	2,110	2,248	3,957	5,046	-
Swansea (village).....	Ont.....	-	-	-	-	-	-	5,031	-
*Yorkton.....	Sask.....	-	-	-	700	2,309	5,151	5,027	4,931
*Dundas.....	Ont.....	3,135	3,709	3,546	3,173	4,299	4,978	5,026	-
*Stellarton.....	N.S.....	1,750	1,599	2,410	2,335	3,910	5,312	5,002	-
*Weyburn.....	Sask.....	-	-	-	113	2,210	3,193	5,002	5,338

¹ The 1936 figures cover cities and towns of the Prairie Provinces only.

20.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants, Decennial Censuses 1901-31 and the Quinquennial Census of 1936.¹

Town or Village.	1901.	1911.	1921.	1931.	Town or Village.	1901.	1911.	1921.	1931.
Prince Edward Island.					Nova Scotia—concluded.				
Summerside.....	2,875	2,678	3,228	3,759	Bridgetown.....	858	996	1,086	1,126
Souris.....	1,140	1,089	1,094	1,063	Mahone Bay.....	866	951	1,177	1,065
Nova Scotia.					Port Hawkesbury.....	633	684	869	1,011
Westville.....	3,471	4,417	4,550	3,946	Joggins.....	1,088	1,648	1,732	1,000
Bridgewater.....	2,203	2,775	3,147	3,262	New Brunswick.				
Pictou.....	3,235	3,179	2,988	3,152	Chatham.....	4,868	4,666	4,506	4,017
Kentville.....	1,731	2,304	2,717	3,033	Dalhousie.....	862	1,650	1,958	3,974
Windsor.....	2,849	2,894	2,946	3,032	St. Stephen.....	2,840	2,836	3,452	3,437
Inverness.....	306	2,719	2,963	2,900	Newcastle.....	2,507	2,945	3,507	3,383
Dominion.....	1,546	2,589	2,390	2,846	Bathurst.....	1,044	960	3,327	3,300
Lunenburg.....	2,916	2,681	2,792	2,727	Woodstock.....	3,644	3,856	3,380	3,259
Liverpool.....	1,937	2,109	2,294	2,669	Sussex.....	1,398	1,906	2,198	2,252
Trenton.....	1,274	1,749	2,844	2,613	Sackville.....	1,444	2,039	2,173	2,234
Parrsboro.....	2,705	2,224	2,161	1,919	Devon.....	-	-	1,924	1,977
Wolfville.....	1,412	1,458	1,743	1,818	Shediac.....	1,075	1,442	1,973	1,883
Antigonish.....	1,838	1,787	1,746	1,764	Milltown.....	2,044	1,804	1,976	1,735
Canso.....	1,479	1,617	1,626	1,575	Grand Falls.....	644	1,280	1,327	1,556
Shelburne.....	1,445	1,435	1,360	1,474	Marysville.....	1,892	1,837	1,614	1,512
Digby.....	1,150	1,247	1,230	1,412	St. Andrews.....	1,064	987	1,065	1,207
Wedgeport.....	1,026	1,392	1,424	1,294	St. George.....	733	988	1,110	1,087
Oxford.....	1,285	1,392	1,402	1,133					

¹ The 1936 figures cover towns and villages of the Prairie Provinces only.

20.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants, Decennial Censuses 1901-31 and the Quinquennial Census of 1936—continued.

Town or Village.	1901.	1911.	1921.	1931.	Town or Village.	1901.	1911.	1921.	1931.
Quebec.					Quebec—concluded.				
St. Jérôme de Matane....	1,176	2,056	3,050	4,757	St. Alexis de la Grande	—	—	—	—
Buckingham.....	2,936	3,854	3,835	4,638	Baie.....	—	1,355	1,735	1,790
Montmorency.....	—	2,710	3,367	4,575	Lac au Saumon.....	—	—	1,171	1,354
Montreal North.....	—	—	1,360	4,519	St. Raymond.....	1,272	1,653	1,693	1,772
Kénogami.....	—	—	2,557	4,500	Acton Vale.....	1,175	1,402	1,549	1,753
Asbestos.....	783	2,224	2,189	4,396	Chandler.....	—	—	1,756	1,741
Farnham.....	3,114	3,560	3,343	4,205	Maniwaki.....	—	—	—	1,720
St. Pierre.....	505	2,201	3,535	4,185	L'Epiphanie.....	—	—	—	1,705
Pointe Claire.....	555	793	2,617	4,058	Courville.....	—	910	1,293	1,678
Coaticook.....	2,880	3,165	3,554	4,044	Ste. Rose.....	1,154	1,480	1,811	1,661
St. Joseph d'Alma.....	—	—	850	3,970	Deschailions.....	1,213	1,161	1,680	1,650
Montmagny.....	1,919	2,617	4,145	3,927	St. Benoit Joseph Labre	—	1,070	1,416	1,648
Mégantic.....	2,171	2,816	3,140	3,911	St. Joseph (Beauce).....	1,117	1,440	1,445	1,625
Lachute.....	2,022	2,407	2,592	3,906	Huntingdon.....	1,122	1,265	1,401	1,619
Beauharnois.....	1,976	2,015	2,250	3,729	Greenfield Park.....	—	—	1,112	1,610
Giffard.....	—	—	1,254	3,573	Arthabaska.....	995	1,458	1,234	1,608
East Angus.....	—	—	3,802	3,566	St. Félicien.....	—	581	1,306	1,599
Ste. Thérèse.....	1,541	2,120	3,043	3,292	Ste. Marie.....	—	—	1,311	1,598
Beauport.....	—	—	3,240	3,242	L'Assomption.....	1,605	1,747	1,320	1,576
Rouyn.....	—	—	—	3,225	Bedford.....	1,364	1,432	1,669	1,570
Montreal West.....	352	703	1,582	3,190	St. Georges East.....	—	1,410	1,058	1,543
Mont Joli.....	822	2,141	2,799	3,143	Lac St. Louis.....	—	—	597	1,537
Pointe aux Trembles.....	—	1,167	2,350	2,970	St. Gabriel de Brandon.	1,199	1,602	1,667	1,530
Ste. Agathe des Monts.....	1,073	2,020	2,812	2,949	St. Jacques.....	—	—	1,332	1,529
Baie St. Paul.....	1,408	1,857	2,291	2,916	St. Michel de Laval.....	—	—	493	1,528
Nicolet.....	2,225	2,593	2,342	2,868	Bromptonville.....	—	1,239	2,603	1,627
Aylmer.....	2,291	3,109	2,970	2,835	Montebello.....	795	954	977	1,601
Charny.....	—	1,408	2,265	2,823	Disraeli.....	1,018	1,606	1,646	1,437
St. Joseph de Grantham.....	—	—	—	2,812	Belœil.....	—	1,501	1,418	1,434
Iberville.....	1,512	1,905	2,454	2,778	Rock Island.....	615	861	1,442	1,424
Laprairie.....	1,451	2,388	2,158	2,774	Causapscal.....	—	—	—	1,390
Roberval.....	1,248	1,737	2,068	2,770	Danville.....	1,017	1,331	1,290	1,354
Windsor.....	2,149	2,233	2,330	2,720	Pont Rouge.....	—	—	1,419	1,353
Laval des Rapides.....	—	1,014	1,989	2,716	Pierreville.....	1,108	1,363	1,394	1,352
Donnacoona.....	—	—	1,225	2,631	Baie de Shawinigan.....	—	1,024	1,213	1,316
Richmond.....	2,057	2,175	2,450	2,596	St. Casimir.....	—	—	1,457	1,316
Plessisville.....	1,586	1,559	2,032	2,536	Thurso.....	525	601	538	1,292
Bagotville.....	507	1,011	2,204	2,468	Chambly Basin.....	849	900	1,068	1,287
Berthier.....	1,364	1,335	2,193	2,431	Laurentides.....	934	1,128	1,150	1,284
Ste. Anne de Bellevue.....	1,343	1,416	2,212	2,417	La Providence.....	819	894	1,078	1,241
La Malbaie?.....	826	1,449	1,883	2,408	St. Jérôme.....	498	719	923	1,235
Mont Laurier.....	—	752	2,211	2,394	St. Pacôme.....	—	—	—	1,235
Louiseville.....	1,565	1,675	1,772	2,365	L'Abord-à-Plouffe.....	—	—	1,011	1,227
La Salle.....	—	—	726	2,362	St. Rémi.....	1,080	1,021	1,135	1,201
Saindon.....	—	—	1,793	2,355	Scotstown.....	791	933	987	1,189
Port Alfred.....	—	—	1,213	2,342	St. Eustache.....	1,079	996	1,098	1,187
Priceville.....	—	—	—	2,310	Montreal South.....	—	790	1,030	1,164
Pointe Gatineau.....	1,583	1,751	1,919	2,282	Dorion.....	275	631	833	1,155
Loretteville.....	1,555	1,588	2,066	2,251	Cap Chat.....	—	—	—	1,139
Noranda.....	—	—	—	2,246	Fort Coulonge.....	482	811	973	1,130
Montreal East.....	—	—	1,776	2,242	St. Joseph de la Rivière	—	—	864	1,111
Waterloo.....	1,797	1,886	2,063	2,192	Bleue.....	—	—	864	1,111
Cabano.....	—	—	—	2,187	Ste. Anne de Chicoutimi	516	657	838	1,102
Mont Royal.....	—	—	160	2,174	Rigaud.....	779	856	939	1,099
Black Lake.....	—	2,645	2,656	2,167	Châteauguay.....	—	—	881	1,067
Amos.....	—	—	1,488	2,153	L'Enfant Jésus.....	—	—	—	1,066
Dorval.....	481	1,005	1,466	2,052	Rawdon.....	—	—	1,042	1,066
Dolbeau.....	—	—	—	2,032	Beebe Plain.....	477	808	921	1,053
Masson.....	1,012	1,034	950	2,015	St. Césaire.....	865	941	985	1,051
Almaville.....	—	—	1,174	2,010	Ville Marie.....	502	850	840	1,049
St. Marc des Carrières.....	296	1,224	1,492	1,997	Rivière du Moulin.....	—	—	738	1,040
Marieville.....	1,306	1,587	1,748	1,986	Val Brilliant.....	—	—	962	1,032
St. Tite.....	991	1,438	1,783	1,969	Bic.....	—	—	112	1,020
Terrebonne.....	1,822	1,990	2,056	1,955	Notre-Dame de Portneuf	—	—	877	1,017
Lennoxville.....	1,120	1,211	1,554	1,927					
Ste. Anne de Beaupré.....	—	2,381	1,648	1,901					
Charlesbourg.....	—	—	1,267	1,869					
St. Joseph (Richelieu).....	647	1,416	1,658	1,869	Leamington.....	2,451	2,652	3,675	4,902
East Broughton.....	—	996	1,709	1,868	Port Hope.....	4,188	5,092	4,456	4,723
Cowansville.....	699	881	1,094	1,859	Weston.....	1,083	1,875	3,166	4,723
Témiscamingue.....	—	—	—	1,855	Goderich.....	4,158	4,522	4,107	4,491
Trois Pistoles.....	—	—	1,454	1,837	Riverside.....	—	—	1,155	4,432
Quebec West.....	—	—	130	1,813	Wallaceburg.....	2,763	3,438	4,006	4,326
Arvida (city).....	—	—	—	1,790	Sturgeon Falls.....	1,418	2,199	4,125	4,234
					Paris.....	3,229	4,098	4,368	4,137

¹ The 1936 figures cover towns and villages of the Prairie Provinces only.
Murray Bay.

² Also known as

20.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants, Decennial Censuses 1901-31 and the Quinquennial Census of 1936¹—concluded.

Town or Village.	1901.	1911.	1921.	1931.	1936. ¹	Town or Village.	1901.	1911.	1921.	1931.	1936. ¹
Saskatchewan.						Alberta—					
Melville.....	-	1,816	2,808	3,891	3,923	concluded.					
Estevan.....	141	1,981	2,290	2,936	2,854	Newcastle.....	-	-	-	304	1,278
Biggar.....	-	315	1,535	2,369	1,953	Magrath.....	424	995	1,069	1,224	1,217
Melfort.....	-	599	1,746	1,809	1,948	Stettler.....	-	1,444	1,416	1,219	1,202
Humboldt.....	-	859	1,822	1,899	1,819	Olds.....	218	917	764	1,056	1,197
Kamsack.....	-	473	2,002	2,087	1,810	Innisfail.....	317	602	941	1,024	1,124
Shaunavon.....	-	-	1,146	1,761	1,636	Claresholm.....	-	809	963	1,156	1,051
Rosetown.....	-	317	865	1,553	1,520	Wainwright.....	-	788	975	1,147	1,048
Lloydminster ²	-	663	755	1,516	1,420	Ponoka.....	151	642	712	836	1,045
Indian Head.....	768	1,285	1,439	1,438	1,365	Pincher Creek.....	335	1,027	888	1,024	999
Rosthern.....	413	1,172	1,074	1,412	1,355	Beverly.....	-	-	1,039	1,111	998
Assiniboia.....	-	-	1,006	1,454	1,257	Redcliff.....	-	220	1,137	1,192	990
Canora.....	-	435	1,230	1,179	1,254	Fort Saskatchewan.....	306	782	982	1,001	899
Tisdale.....	-	250	783	1,069	1,152	British Columbia.					
Watrous.....	-	781	1,101	1,303	1,147	Kelowna (city)...	261	1,663	2,520	4,655	-
Wilkie.....	-	537	778	1,222	1,220	Vernon (city)....	802	2,671	3,685	3,937	-
Battleford.....	609	1,335	1,229	1,096	1,128	Cranbrook (city)...	1,196	3,090	2,725	3,067	-
Wynyard.....	-	515	849	1,042	1,110	Rossland (city)...	6,156	2,826	2,097	2,848	-
Moosomin.....	868	1,143	1,099	1,119	1,104	Revelstoke (city)...	1,600	3,017	2,782	2,736	-
Maple Creek.....	382	936	1,002	1,154	1,032	Fernie (city).....	-	3,146	2,802	2,732	-
Kindersley.....	-	456	1,003	1,037	1,030	Prince George (city).....	-	-	2,053	2,479	-
Gravelbourg.....	-	-	1,106	1,137	985	Chilliwack (city)...	277	1,657	1,767	2,461	-
Sutherland.....	-	421	961	1,148	942	Cumberland (city).....	732	1,237	2,161	2,371	-
Herbert.....	-	559	827	1,009	900	Port Alberni (city).....	-	-	1,056	2,356	-
Radville.....	-	233	883	1,005	854	Duncan (city)....	-	-	1,178	1,843	-
Alberta.						Ladysmith (city).....	746	2,517	1,151	1,443	-
Drumheller (city)...	-	-	2,499	2,987	2,912	Mission (village)...	-	-	-	1,314	-
Red Deer (city)...	323	2,118	2,328	2,344	2,384	Port Coquitlam (city).....	-	-	1,178	1,312	-
Camrose.....	-	1,586	1,892	2,258	2,263	Grand Forks (city).....	1,012	1,577	1,469	1,298	-
Coleman.....	-	1,557	1,590	1,704	2,129	Merritt (city)....	-	703	1,389	1,296	-
Raymond.....	-	1,465	1,394	1,849	2,094	Port Moody (city).....	-	-	1,030	1,260	-
Wetaskiwin (city)...	550	2,411	2,061	2,125	2,058	Courtenay (city)...	-	-	810	1,219	-
Cardston.....	639	1,207	1,612	1,672	1,711						
Blairmore.....	231	1,137	1,552	1,629	1,682						
Vegreville.....	-	1,029	1,479	1,659	1,672						
Edson.....	-	497	1,138	1,547	1,600						
Grande Prairie....	-	-	1,061	1,464	1,478						
Lacombe.....	499	1,029	1,133	1,259	1,414						
Hanna.....	-	-	1,364	1,490	1,405						
Macleod.....	796	1,844	1,723	1,447	1,365						
High River.....	153	1,182	1,198	1,459	1,359						
Taber.....	-	1,400	1,705	1,279	1,341						
Vermilion.....	-	625	1,272	1,270	1,291						

¹ The 1936 figures cover towns and villages of the Prairie Provinces only.

² Under the Saskatchewan Town Act, Lloydminster, Alberta, is merged with Lloydminster, Saskatchewan, for municipal purposes.

Rural and Urban Farm Populations.—At p. 126 of the 1937 Year Book statistics of rural and urban farm population, by provinces, as compiled from the Census of 1931 were given, and at p. 299 of the 1934-35 Year Book details regarding farm workers, those farms employing hired labour, the period of employment and the cost of labour were shown. The reader is also referred to the item "Wage-earners" (in agriculture) in the index of the present volume for further information on these topics.

Section 11.—Literacy.

The subject of literacy was discussed at pp. 131-132 of the 1936 Year Book. At p. 157 of the 1934-35 Year Book will be found a table showing the literacy of the population of 5 years and over from 1901 to 1931, at pp. 158-159 of the same edition the same information as is now summarized in Table 21 was given by sex, while on p. 160 was shown the literacy of the population of cities and towns of 30,000 population or over, as in 1931.

21.—Literacy of the Population of 10 Years of Age or Over, by Provinces, 1931.

NOTE.—Corresponding figures for 1921 are to be found in the 1924 Year Book, p. 131.

Province.	Popula- tion 10 Years or Over.	Can Read and Write.	Can Read only.	Can neither Read nor Write.	Percentages.		
					Can Read and Write.	Can Read only.	Can neither Read nor Write.
	No.	No.	No.	No.	p.c.	p.c.	p.c.
Prince Edward Island.....	69,333	66,996	502	1,835	96.63	0.72	2.65
Nova Scotia.....	402,401	382,472	2,790	17,139	95.05	0.69	4.26
New Brunswick.....	310,316	286,676	2,200	21,440	92.38	0.71	6.91
Quebec.....	2,167,517	2,048,778	15,527	103,212	94.52	0.72	4.76
Ontario.....	2,791,072	2,719,558	7,357	64,157	97.44	0.26	2.30
Manitoba.....	557,806	530,779	2,151	24,876	95.15	0.39	4.46
Saskatchewan.....	705,350	672,812	3,441	29,097	95.39	0.49	4.13
Alberta.....	572,129	549,789	2,671	19,669	96.10	0.47	3.44
British Columbia.....	583,135	558,417	1,630	23,088	95.76	0.28	3.96
Yukon.....	3,542	2,710	30	802	76.51	0.85	22.64
Northwest Territories.....	7,021	2,832	108	4,081	40.34	1.54	58.13
Canada.....	8,169,622	7,821,819	38,407	309,396	95.74	0.47	3.79

Section 12.—School Attendance.

At pp. 132-133 of the 1936 Year Book a treatment of this subject will be found, together with tables showing school attendance, (1) of the population 5-19 years of age, by sex, for the census years 1911, 1921, and 1931, (2) of the total rural and urban populations, by sex, for 1931, and (3) of the population 7-14 years of age, by nativity and sex, for 1931.

Section 13.—Blind and Deaf-Mutes.

The 1936 Year Book showed, at pp. 134-135, figures of the number of blind and deaf-mutes by provinces and sex in 1931, together with the number and proportion of such persons as found at the decennial censuses from 1881 to 1931. Summary statistics are given below.

22.—Deaf-Mutes¹ by Number and Proportion per 10,000 Population, by Provinces, 1881-1931.

Province.	Number.						Proportions per 10,000 Population.					
	1881.	1891.	1901.	1911.	1921.	1931.	1881.	1891.	1901.	1911.	1921.	1931.
Prince Edward Island.....	122	87	98	46	40	45	11.2	8.0	9.5	5.0	4.5	5.1
Nova Scotia.....	581	495	627	472	437	456	13.2	11.0	13.6	9.6	8.3	8.9
New Brunswick.....	401	354	443	273	297	345	12.5	11.0	13.4	7.8	7.6	8.5
Quebec.....	2,225	2,108	2,488	1,635	1,891	2,778	16.4	14.2	15.1	8.2	8.0	9.7
Ontario.....	1,963	1,603	2,002	1,410	1,842	1,807	10.2	7.6	9.2	5.6	6.3	5.3
Manitoba.....	49	102	291	296	273	467	7.9	6.7	11.4	6.5	4.5	6.7
Saskatchewan.....	—	—	73	180	256	361	—	—	8.0	3.7	3.4	3.9
Alberta.....	—	—	45	147	163	290	—	—	6.2	3.9	2.8	4.0
British Columbia.....	27	44	92	108	132	218	5.5	4.5	5.1	2.8	2.5	3.1
Totals, Nine Provinces....	5,368	4,793	6,159	4,567	5,331	6,767	12.6	10.1	11.6	6.4	6.1	6.5

¹ Not including blind deaf-mutes.**Section 14.—Dwellings and Family Households.**

An extensive treatment of this subject, as it came under observation at the Census of 1931, will be found at pp. 136-139 of the 1936 Year Book.

Section 15.—Occupations of the Canadian People.

An article specially prepared for the Year Book, and analysing comprehensively the occupations of the Canadian people as shown by the 1931 Census, appeared at pp. 128-146 of the 1937 Year Book.

Section 16.—Quinquennial Census of the Prairie Provinces.

The latest census of the Prairie Provinces was that taken as of June 1, 1936. The 1937 edition of the Year Book, at pp. 146-152, showed statistics covering the population of each province, by electoral districts, sex, conjugal condition, age distribution, racial origin, birthplace, and by rural or urban habitation. Unfortunately, at the June 1 enumeration a small area in Saskatchewan with 654 inhabitants was not covered and had to be enumerated later. The 1936 figures as published for Saskatchewan in the 1937 Year Book should therefore be corrected by adding 654 to the total rural population there published. An adjustment is also to be made to the urban population by deducting 98 on account of disorganized urban centres; this is also to be added to the rural. The total difference to the rural population is therefore an addition of 752 and that to the urban a deduction of 98, the net result being an addition to the provincial total of 654. Normally the tables would have been republished in this edition, but the error was not apparent until most of the Year Book had been 'made-up'. In Volumes I and II of the 1936 Census, the figures are published in final form.

As the composition of the population of the three provinces, taken as a unit, cross classified according to racial origin and birthplace, is of general interest, the following table has been specially compiled for the Year Book. It shows the birth-places of both the rural and urban populations for each of the principal racial strains making up the population of the Prairie Provinces. Of the total population of 2,415,545, the number of persons of British racial origin was 1,189,612 or 49·2 p.c., of whom 1,120,242, or 94 p.c. (46·4 p.c. of the total) were born in Canada or in other British lands. The percentage born in Canada was 75. The population of French origin numbered 137,778, or 5·7 p.c. of the total, the great majority being Canadian-born.

Other important elements in the population are the German, Ukrainian, and Scandinavian racial strains, amounting to 12·8 p.c., 9·4 p.c., and 6·8 p.c., respectively. By place of birth, the population is divided as follows: Canada, 1,648,490, or 68·3 p.c.; other British countries, 275,820, or 11·4 p.c.; U.S.A. 152,908, or 6·3 p.c.; and other foreign countries, 338,327, or 14·0 p.c. From the information presented below, the reader will be able to make further analyses, according to the particular phase of the subject in which he may be interested.

23.—Rural and Urban Population of the Prairie Provinces, by Racial Origin, Birth-place, and Sex, as at June 1, 1936.

Racial Origin.	Born in Canada.		Born in Other British Countries.		Born in the United States.		Born in Other Foreign Countries.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
British—								
English.....M.	108,158	85,101	45,732	46,499	10,913	4,984	179	129
F.	93,496	90,668	32,557	41,904	8,771	6,164	97	146
Irish.....M.	67,164	44,003	7,598	7,940	8,004	3,534	31	30
F.	53,120	45,717	4,842	6,644	5,822	3,796	14	23
Scottish.....M.	72,027	56,671	19,148	21,239	5,394	2,626	43	53
F.	59,041	58,586	13,210	19,345	3,846	2,836	25	56
Other.....M.	3,506	3,106	2,461	2,147	737	339	29	15
F.	2,944	2,927	1,250	1,491	401	293	24	16
French.....M.	46,050	16,617	94	101	3,660	1,310	2,928	947
F.	39,714	18,086	73	96	3,079	1,897	2,088	1,038
Austrian.....M.	3,634	1,432	5	4	126	25	2,665	1,312
F.	3,199	1,693	—	2	88	47	1,590	943
Belgian.....M.	2,950	746	3	3	127	24	2,440	867
F.	2,769	865	4	5	104	32	1,647	738
Czech and Slovak.....M.	2,479	936	6	2	410	106	3,277	1,222
F.	2,189	956	—	1	282	129	1,873	698

23.—Rural and Urban Population of the Prairie Provinces, by Racial Origin, Birth-place, and Sex, as at June 1, 1936—concluded.

Racial Origin.	Born in Canada.		Born in Other British Countries.		Born in the United States.		Born in Other Foreign Countries.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
Dutch.....M.	13,203	4,314	26	24	1,891	755	4,186	1,189
F.....F.	16,606	4,578	24	17	1,472	739	3,001	981
Finnish.....M.	1,443	130	1	—	294	31	1,214	191
F.....F.	1,260	226	—	—	233	66	764	163
German.....M.	78,977	20,771	99	87	14,708	3,419	33,071	10,463
F.....F.	73,141	24,335	86	69	11,308	4,030	24,448	9,948
Hebrew.....M.	533	5,856	23	161	10	233	513	5,834
F.....F.	444	5,648	17	170	20	269	410	6,078
Hungarian.....M.	4,512	948	4	1	112	28	5,061	1,682
F.....F.	3,966	1,141	2	1	101	43	3,016	1,148
Italian.....M.	920	1,271	10	23	56	57	1,062	1,196
F.....F.	925	1,376	4	12	43	54	491	716
Polish.....M.	13,329	6,225	13	6	441	94	14,460	6,179
F.....F.	16,638	7,616	5	7	349	161	9,712	4,965
Roumanian.....M.	3,709	1,005	2	—	34	14	2,023	905
F.....F.	3,470	1,185	3	2	47	24	1,267	530
Russian.....M.	10,136	2,483	13	16	344	104	6,593	2,250
F.....F.	9,374	2,781	6	14	281	115	4,681	1,715
Scandinavian.....M.	34,650	9,848	62	44	12,706	3,064	24,393	6,896
F.....F.	31,026	11,743	62	50	9,372	3,705	12,258	4,836
Ukrainian.....M.	59,767	13,866	18	5	217	78	33,686	12,235
F.....F.	55,757	16,701	12	14	196	92	24,700	8,698
Other European.....M.	1,043	760	9	22	83	38	1,729	1,165
F.....F.	918	801	12	21	69	56	803	556
Asiatic—								
Chinese and Japanese.....M.	213	487	—	3	3	2	868	5,399
F.....F.	172	389	—	3	1	1	78	124
Other.....M.	192	316	17	5	12	11	166	208
F.....F.	219	305	3	2	9	19	66	115
Indian.....M.	19,235	220	—	—	47	8	—	—
F.....F.	18,468	266	—	—	47	5	—	—
Unspecified and others.....M.	12,023	1,492	16	52	385	317	25	15
F.....F.	11,016	1,572	14	18	269	210	6	13
Totals.....M.	569,853	278,604	75,362	78,384	60,714	21,201	140,642	60,382
F.....F.	499,872	300,161	52,186	69,888	46,210	24,783	93,059	44,244
Grand Totals.....	1,069,725	578,765	127,548	148,272	106,924	45,984	233,701	104,626

Section 17.—Annual Estimates of Population.

While the populations in different countries are actually counted at decennial or quinquennial censuses, annual estimates of populations are required by modern States for many purposes, such as the calculation of birth, death, and marriage rates, and of per capita figures of production, trade, finance, consumption, etc. In different countries various methods of obtaining annual figures of post-censal populations are adopted. For example, it is possible, with good vital statistics and records of arrivals and departures, to obtain the actual population at any particular date with approximate accuracy by the simple method of adding births and arrivals and subtracting deaths and departures during the period elapsed since the census. This method is impracticable for Canada, with 4,000 miles of common boundary line with the United States, crossed in both directions every day by many thousands of people. In almost all civilized countries, the actual methods of making the estimates vary. Thus, the method of arithmetical progression is widely used in estimating the populations in the older countries of the world; this method involves the annual addition to the population of the country and of particular areas within it of one-fifth or one-tenth of the numerical increase in the last quinquennial or decennial intercensal period. In the case of Canada annual figures of population

were purely estimates, made on the basis of past increases, prior to the Census of 1931. They have now been worked out on a basis which takes into consideration collateral data back to 1867, and the resulting figures are believed to state the populations at intercensal periods more accurately than any published prior to 1931.

The new method upon which calculations are based was described at pp. 108-109 of the 1932 Year Book.*

24.—Estimates of the Population of Canada, by Provinces, intercensal years, 1900-37.

NOTE.—At every census the previous post-censal data are adjusted to the newly recorded population figure. Figures for 1867-99 will be found at p. 141 of the 1936 Year Book.

(In thousands.)

Year.	Can- ada.	P.E. Is- land.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yu- kon.	N.W. Terri- tories.
1900.....	5,301	103	459	329	1,630	2,172	245	—	—	170	—	193
1901.....	5,371	103	460	331	1,649	2,183	255	91	73	179	27	20
1902.....	5,494	101	459	331	1,670	2,194	275	125	96	199	25	19
1903.....	5,651	100	460	331	1,709	2,217	296	159	119	220	23	17
1904.....	5,827	99	463	333	1,752	2,246	318	194	142	242	22	16
1905.....	6,002	99	464	333	1,771	2,289	344	236	166	264	21	15
1906.....	6,097	96	465	334	1,784	2,299	366	258	185	279	18	13
1907.....	6,411	96	475	341	1,853	2,365	395	311	236	309	18	12
1908.....	6,625	95	480	345	1,902	2,412	413	356	266	330	15	11
1909.....	6,800	94	483	346	1,931	2,444	427	401	301	350	13	10
1910.....	6,988	94	486	348	1,965	2,482	441	446	336	370	11	9
1911.....	7,207	94	492	352	2,006	2,527	461	492	374	393	9	7
1912.....	7,389	94	496	356	2,042	2,572	481	525	400	407	9	7
1913.....	7,632	94	504	363	2,096	2,639	505	563	429	424	8	7
1914.....	7,879	95	512	371	2,148	2,705	530	601	459	442	8	8
1915.....	7,981	94	511	371	2,162	2,724	545	628	480	450	8	8
1916.....	8,001	92	505	368	2,154	2,713	554	648	496	456	7	8
1917.....	8,060	90	503	368	2,169	2,724	558	662	508	464	6	8
1918.....	8,148	89	502	369	2,191	2,744	565	678	522	474	6	8
1919.....	8,311	89	507	373	2,234	2,789	577	700	541	488	5	8
1920.....	8,556	89	516	381	2,299	2,863	594	729	565	507	5	8
1921.....	8,788	89	524	388	2,361	2,934	610	757	588	525	4	8
1922.....	8,919	89	522	389	2,409	2,980	616	769	592	541	4	8
1923.....	9,010	87	518	389	2,446	3,013	619	778	593	555	4	8
1924.....	9,143	86	516	391	2,495	3,059	625	791	597	571	4	8
1925.....	9,294	86	515	393	2,549	3,111	632	806	602	588	4	8
1926.....	9,451	87	515	396	2,603	3,164	639	821	608	606	4	8
1927.....	9,636	87	515	398	2,657	3,219	651	841	633	623	4	8
1928.....	9,835	88	515	401	2,715	3,278	664	862	658	641	4	9
1929.....	10,029	88	515	404	2,772	3,334	677	883	684	659	4	9
1930.....	10,208	88	514	406	2,825	3,386	689	903	708	676	4	9
1931.....	10,376	88	513	408	2,874	3,432	700	922	732	694	4	9
1932 ¹	10,506	89	519	413	2,910	3,475	709	933	740	704	4	10
1933 ¹	10,681	89	522	420	2,970	3,564	710	932	748	712	4	10
1934 ¹	10,824	89	525	425	3,018	3,629	711	932	756	725	4	10
1935 ¹	10,935	89	527	429	3,062	3,673	711	931	764	735	4	10
1936 ¹	11,028	92	537	435	3,096	3,690	711	931	772	750	4	10
1937 ¹	11,120	93	542	440	3,135	3,711	717	939	778	751	4	10

¹ These estimates are subject to adjustment as later data are made available.

Section 18.—Area and Population of the British Empire.

Statistics of the areas and populations of the territories included in the British Empire in 1931, together with comparative figures of populations for 1921 and 1911, are given in a table on p. 165 of the 1934-35 Year Book.

Section 19.—Area and Population of the World.

Statistics showing the areas and the populations of the various continents, and details of each country, as in 1931, are given in a table on pp. 168-169 of the 1934-35 Year Book.

* The table of estimates and the description of the method upon which calculations are based are the work of M. C. MacLean, M.A., F.S.S., Chief of Social Analysis, Dominion Bureau of Statistics.

CHAPTER V.—VITAL STATISTICS.*

The collection of vital statistics commenced in Canada, as in England, with the registration of baptisms, marriages, and burials by the ecclesiastical authorities. These registers, maintained by the priests from the first settlement of the country, have made it possible for the vital statistics of the French colony to be compiled from the year 1610.† The system of registration by clergy was continued after the cession of the country to the British, and was extended to the newly-formed Protestant congregations of Lower Canada by an Act of 1795, but the registration, particularly of births, among these latter remained seriously defective, both in Lower Canada and in the new province of Upper Canada, the pioneer settlers often going out into the wilds far from the authority of government and the ministrations of religion. An early attempt was made to remedy the situation through the census by including a schedule requesting births and deaths for the preceding year, but the efforts made to secure records of births and deaths at the Censuses of 1851 and 1861 produced most unsatisfactory results. Nevertheless, in spite of the inherent unsoundness of securing, at a point of time in a decennial census, a record of births and deaths occurring over a considerable period of time, this method was followed down to 1911, when the obviously untrustworthy character of the results led to the discarding of the data obtained at the inquiry.

In English-speaking Canada, the earlier scheme of registration of baptisms, burials, and marriages by the clergy was succeeded after Confederation by Acts for the enforcement of registration of births, marriages, and deaths, with the civil authorities. Such Acts were passed in Nova Scotia in 1864, in Ontario in 1869, in British Columbia in 1872, in Manitoba in 1881, in New Brunswick in 1887, and in Prince Edward Island in 1906. The provinces of Saskatchewan and Alberta were not established until 1905 and, until provincial Acts were passed after this date, civil registration in these provinces was governed by ordinances for the Northwest Territories, the first of which was passed in 1888.

The Dominion Government instituted in the early '80's a plan for compiling the annual mortuary statistics of cities of 25,000 population and over, by subsidizing local boards of health to supply the information under special regulations. A beginning was made with the five cities of Montreal, Toronto, Hamilton, Halifax, and Saint John. By 1891 the list had grown to 25, at a time when, in most of the provinces, the only birth and death statistics were those of the municipalities. Upon the organization of provincial bureaus of vital statistics, however, this work was abandoned, though a conference of Dominion and provincial officials, held in 1893, passed a resolution calling upon the provincial and Dominion authorities to co-operate in the work of collecting, compiling, and publishing the vital statistics of the Dominion. This resolution had no immediate practical results in securing accurate or comparable vital statistics.

The 1912 Commission on Official Statistics, recommended that "for the Dominion, now engaged in building up its national unity, it is important that uniform data should render possible to statisticians the institution of true interprovincial and international comparisons. By effective co-operation of the provinces with

* This chapter has been revised by W. R. Tracey, B.A., Chief, Vital Statistics, Dominion Bureau of Statistics. A list of the publications of this Branch will be found in Chapter XXIX, Section 1, under "Population".

† For a summary of the vital statistics of the Roman Catholic population from 1610 to 1883, see the Statistical Year Book of Quebec, 1921, English or French edition, p. 51. For details, by years, of this movement of population, see Vol. V of the Census of Canada, 1871, pp. 160-265, and Vol. IV of the Census of Canada, 1881, pp. 134-145.

the Dominion, this object should be capable of attainment without sacrificing the liberty of each province to satisfy its own special statistical requirements". Yet, prior to 1920, it was impossible to compile any satisfactory series of vital statistics figures for Canada as a whole. Among the obstacles to such a national compilation were the inequalities of registration between the provinces, the lack of uniformity in classification and in the method of presentation, the omission in some cases of important data, the choice in some cases of the fiscal instead of the calendar year as the unit of time, and the fact that for some of the provinces within comparatively recent years the series of publications was broken, while for New Brunswick no provincial vital statistics at all were published from 1895 until 1920.

Co-operation was finally effected as a consequence of the establishment of the Dominion Bureau of Statistics under the Statistics Act of 1918, which specifically provided that the Bureau should publish an annual report on vital statistics. A scheme was first drawn up in the Bureau and submitted to the various provinces; then Dominion-Provincial conferences on vital statistics were held in June and December, 1918, when final discussions took place.

In 1919, as a result of conference, a plan was devised whereby the Bureau of Statistics and the Registrar General's office in each province would co-operate in producing national vital statistics for the Dominion. Under this national system, while registration of births, marriages, and deaths, is carried out as heretofore by the provincial authorities, the legislation of each province conforms in its essentials to a model bill, prepared by the Dominion Bureau of Statistics, one of the features of which was compulsory registration. The Bureau of Statistics undertakes compilation and tabulation.

Under the scheme outlined above, the vital statistics for all the provinces except Quebec were secured and compiled on a uniform basis for the years 1921 to 1925. The annual reports for these years may be obtained on application to the Dominion Statistician.

Quebec has been included in the registration area as from Jan. 1, 1926, from which date her statistics are on a comparable basis with those of the other provinces. The final reports for 1926 to 1935, including the statistics of all the nine provinces, have appeared and may be procured from the Dominion Statistician, with the exception of the report for 1931, which is out of print.

Two important considerations should be borne in mind by the student who uses either the tables which follow or the detailed reports issued by the Bureau of Statistics for comparative purposes. First, in spite of the improvements of the past decade, registration generally, and the registration of births in particular, is not as yet universally carried out. Secondly, the very considerable differences in the age and sex distribution of the population in different provinces make comparisons of crude births rates and crude death rates, as among the provinces, unfair and misleading. All rates in this chapter have been recalculated on the basis of the revised estimates of population given on p. 155.

Yukon and Northwest Territories.—The vital statistics of Yukon and the Northwest Territories have been collected and compiled since 1924. They are not, however, presented with those of the nine provinces in the tables of this chapter because the figures are not regarded as complete, the details are in many cases not available, and the small and varying population is not known with sufficient accuracy for each year to enable the rates to be calculated. As these territories contain

less than 1/700th of the population of Canada, their vital statistics are a negligible factor in the total. Births, marriages, and deaths in Yukon and the Northwest Territories, for the years 1924-36, are summarized in the statement herewith:—

VITAL STATISTICS OF YUKON AND THE NORTHWEST TERRITORIES, 1924-36.

Year.	Yukon.			Northwest Territories.		
	Births.	Marriages.	Deaths.	Births.	Marriages.	Deaths.
1924.....	31	5	38	95	39	47
1925.....	22	17	63	57	35	32
1926.....	27	12	68	75	3	51
1927.....	29	19	33	126	20	133
1928.....	30	13	46	222	30	367
1929.....	35	10	54	133	29	168
1930.....	45	17	69	232	36	206
1931.....	40	24	66	141	36	106
1932.....	44	26	62	195	33	122
1933.....	58	15	60	179	26	128
1934.....	44	29	48	203	47	154
1935.....	58	27	69	231 ¹	63	175 ¹
1936 ²	38	26	82	198	64	170

¹ Revised since the publication of the 1937 Year Book.

² Preliminary figures.

The vital statistics of the provinces are taken up in the following order: births, marriages, deaths, and finally natural increase.

Section 1.—Births.

Throughout almost the whole of the civilized world the birth rate has, in the past generation, been on the decline, though the consequent reduction in the rate of natural increase has been partly offset by the synchronous decline in the death rate.

The crude birth rate of England and Wales, for example, was 35.4 per 1,000 population for the average of the decennium 1871-80, 32.5 in 1881-90, and 29.9 in 1891-1900. In 1913 the birth rate was 24.1, and, though it rose to 25.5 in 1920, it has fallen quite rapidly, with minor fluctuations since then to 14.7 in 1935.

Similarly, in France the crude birth rate declined from an average of 25.4 per 1,000 population in the 1870's, 23.9 in the 1880's and 22.2 in the 1890's to 21.4 in 1920, 16.1 in 1934, and 15.2 in 1935. In Germany, again, the crude birth rate was 39.1 in the 1870's, 36.8 in the 1880's, 36.1 in the 1890's, 25.9 in 1920, 17.6 in 1930, and 14.7 in 1933. Since then the rate has recovered to 18.9 in 1935.

In Canada the crude birth rate still stands at a comparatively high figure, being 20.0 per 1,000 in 1936. This, however, is largely due to the influence of Quebec, where the rate, although declining, stood at 24.3 per 1,000 in 1936, as compared with 16.9 per 1,000 in Ontario. In the other provinces the figures varied from a low of 14.1 in British Columbia to a high of 24.2 in New Brunswick.

Birth statistics are given by sex in Table 1, p. 159. Table 2 gives the number of live births in cities and towns of 10,000 population or over for the years 1932 to 1936, inclusive. For some years previous to 1930 there was a definite tendency for such births to increase, but the figures given indicate an opposite trend since that year.

Sex of Live Births.—Table 1 shows the number and proportion of live male and female births reported for each province of Canada during the calendar years 1934, 1935, and 1936, with averages for the five-year periods 1921-25, 1926-30, and 1931-35. The figures for Quebec commence only with the year 1926, when that

province entered the registration area, and the totals for Canada are limited in the same manner in consequence. Every province shows an excess of male births for the years or averages shown in the table. The table shows that among every 1,000 born in 1936 in the whole of Canada, 514 were males and 486 females. In other words, there were 1,058 males born to every 1,000 females.

1.—Births (Exclusive of Stillbirths) by Sex, and Ratio of Males to Females, by Provinces, 1934-36, with Averages for 1921-25, 1926-30, and 1931-35.

NOTE.—For corresponding figures for single years 1921-25, see p. 165 of the Canada Year Book for 1927-28, for those for 1926-30, p. 156 of the Canada Year Book for 1933, and those for 1931-33, p. 156 of the 1936 Year Book.

Province and Year.	Total. ¹	Males.		Females.		Males to 1,000 Females.	
		Number.	Per Cent of Total.	Number.	Per Cent of Total.		
Prince Edward Island.....	Av. 1921-25	1,966	993	50.5	973	49.5	1,021
	Av. 1926-30	1,734	898	51.8	836	48.2	1,074
	Av. 1931-35	1,961	1,012	51.6	949	48.4	1,067
	1934	1,943	988	50.8	955	49.2	1,035
	1935	2,010	1,013	50.4	997	49.6	1,016
	1936	1,977	1,044	52.8	933	47.2	1,119
Nova Scotia.....	Av. 1921-25	12,119	6,275	51.8	5,844	48.2	1,074
	Av. 1926-30	11,016	5,653	51.3	5,363	48.7	1,054
	Av. 1931-35	11,486	5,906	51.4	5,580	48.6	1,058
	1934	11,407	5,878	51.5	5,529	48.5	1,063
	1935	11,617	5,980	51.5	5,637	48.5	1,061
	1936	11,808	6,127	51.9	5,681	48.1	1,079
New Brunswick.....	Av. 1921-25	11,080	5,708	51.5	5,372	48.5	1,063
	Av. 1926-30	10,327	5,292	51.2	5,035	48.8	1,051
	Av. 1931-35	10,440	5,344	51.2	5,096	48.8	1,049
	1934	10,164	5,149	50.7	5,015	49.3	1,027
	1935	10,388	5,257	50.6	5,131	49.4	1,025
	1936	10,513	5,368	51.1	5,145	48.9	1,043
Quebec ²	Av. 1926-30	82,771	42,644	51.5	40,127	48.5	1,063
	Av. 1931-35	78,889	40,466	51.3	38,423	48.7	1,053
	1934	76,432	39,123	51.2	37,309	48.8	1,049
	1935	75,267	38,444	51.1	36,823	48.9	1,044
	1936	75,285	38,578	51.2	36,707	48.8	1,051
Ontario.....	Av. 1921-25	71,454	36,725	51.4	34,729	48.6	1,057
	Av. 1926-30	68,703	35,268	51.3	33,435	48.7	1,055
	Av. 1931-35	65,000	33,324	51.3	31,676	48.7	1,052
	1934	62,234	31,850	51.2	30,384	48.8	1,048
	1935	63,069	32,367	51.3	30,702	48.7	1,054
	1936	62,451	32,124	51.4	30,327	48.6	1,059
Manitoba.....	Av. 1921-25	16,590	8,443	50.9	8,147	49.1	1,036
	Av. 1926-30	14,391	7,399	51.4	6,992	48.6	1,058
	Av. 1931-35	13,690	7,005	51.2	6,685	48.8	1,048
	1934	13,310	6,842	51.4	6,468	48.6	1,058
	1935	13,335	6,770	50.8	6,565	49.2	1,031
	1936	12,855	6,670	51.9	6,185	48.1	1,078
Saskatchewan.....	Av. 1921-25	21,580	11,119	51.5	10,461	48.5	1,063
	Av. 1926-30	21,298	10,979	51.5	10,319	48.5	1,064
	Av. 1931-35	20,325	10,444	51.4	9,881	48.6	1,057
	1934	19,764	10,175	51.5	9,589	48.5	1,061
	1935	19,569	10,063	51.4	9,506	48.6	1,059
	1936	19,125	9,839	51.4	9,286	48.6	1,060
Alberta.....	Av. 1921-25	15,461	7,887	51.0	7,574	49.0	1,041
	Av. 1926-30	15,924	8,153	51.2	7,771	48.8	1,049
	Av. 1931-35	16,556	8,505	51.4	8,051	48.6	1,056
	1934	16,236	8,246	50.8	7,990	49.2	1,032
	1935	16,183	8,309	51.3	7,874	48.7	1,055
	1936	15,786	8,081	51.2	7,705	48.8	1,049
British Columbia.....	Av. 1921-25	10,256	5,310	51.8	4,946	48.2	1,074
	Av. 1926-30	10,356	5,266	50.8	5,090	49.2	1,035
	Av. 1931-35	10,005	5,136	51.3	4,869	48.7	1,055
	1934	9,813	5,072	51.7	4,741	48.3	1,070
	1935	10,013	5,090	50.8	4,923	49.2	1,034
	1936	10,571	5,458	51.6	5,113	48.4	1,067
Canada ² (Exclusive of the Territories).....	Av. 1926-30	236,520	121,552	51.4	114,968	48.6	1,057
	Av. 1931-35	228,352	117,142	51.3	111,210	48.7	1,053
	1934	221,303	113,323	51.2	107,980	48.8	1,049
	1935	221,451	113,293	51.2	108,158	48.8	1,047
	1936	220,371	113,289	51.4	107,082	48.6	1,058

¹ Corresponding crude birth rates appear in Table 32, pp. 191-193.

² Quebec was not included in the registration area prior to 1926.

2.—Live Births in Cities and Towns of 10,000 Population or Over, 1932-36, with Averages, 1926-30 and 1931-35.

Province and City or Town.	Census Population, 1931.	Averages, 1926-30.	Averages, 1931-35.	1932.	1933.	1934.	1935.	1936.
P. E. Island—								
Charlottetown.....	12,361	287	361	388	337	358	350	405
Nova Scotia—								
Glace Bay.....	20,706	672	702	724	602	715	779	803
Halifax.....	59,275	1,457	1,629	1,620	1,591	1,607	1,679	1,755
Sydney.....	23,089	511	586	601	512	588	589	602
New Brunswick—								
Moncton.....	20,689	518	494	511	463	480	459	487
Saint John.....	47,514	1,144	1,203	1,297	1,127	1,211	1,164	1,223
Quebec—								
Chicoutimi.....	11,877	553	508	558	499	486	508	504
Granby.....	10,587	298	354	378	348	348	308	300
Hull.....	29,433	1,001	875	874	852	853	810	822
Joliette.....	10,765	347	329	352	334	285	332	289
Lachine.....	18,630	442	398	411	373	368	348	355
Lévis.....	11,724	307	261	283	261	242	232	212
Montreal.....	818,577	20,205	19,002	19,742	18,449	18,463	17,786	17,369
Outremont.....	28,641	124	95	115	94	82	84	68
Quebec.....	130,594	4,379	4,137	4,285	4,049	4,017	3,871	3,834
St. Hyacinthe.....	13,448	333	352	363	339	331	356	379
St. Jean.....	11,256	324	295	310	278	296	275	307
Shawinigan Falls.....	15,345	658	570	624	559	530	511	529
Sherbrooke.....	28,933	786	753	769	730	728	740	783
Sorel.....	10,320	297	265	279	246	248	236	240
Thetford Mines.....	10,701	465	351	376	305	364	293	294
Three Rivers.....	35,450	1,329	1,187	1,232	1,050	1,196	1,129	1,121
Valleyfield.....	11,411	317	358	387	326	367	357	344
Verdun.....	60,745	1,057	1,021	1,166	1,003	925	851	891
Westmount.....	24,235	110	313	325	305	312	267	208
Ontario—								
Belleville.....	13,790	370	376	365	349	367	377	430
Brantford.....	30,107	682	627	641	630	575	601	666
Chatham.....	14,569	485	484	461	468	506	528	578
Cornwall.....	11,126	468	482	452	465	434	600	563
Fort William.....	26,277	635	558	593	535	474	530	485
Galt.....	14,006	277	296	309	282	289	278	267
Guelph.....	21,075	395	351	366	356	327	341	299
Hamilton.....	155,547	3,041	2,957	3,111	2,864	2,730	2,763	2,758
Kingston.....	23,439	595	657	658	685	609	687	674
Kitchener.....	30,793	754	752	729	693	727	759	743
London.....	71,148	1,381	1,379	1,397	1,281	1,337	1,426	1,410
Niagara Falls.....	19,046	466	421	402	398	405	437	384
North Bay.....	15,528	417	390	398	387	368	390	393
Oshawa.....	23,439	645	525	516	469	510	523	524
Ottawa.....	126,872	2,965	2,960	3,027	2,873	2,824	3,040	3,028
Owen Sound.....	12,839	334	319	296	316	323	320	327
Peterborough.....	22,327	579	577	592	567	545	571	621
Port Arthur.....	19,818	542	511	534	518	477	524	541
St. Catharines.....	24,753	596	589	591	573	605	548	577
St. Thomas.....	15,430	326	296	300	258	323	297	291
Sarnia.....	18,191	431	413	398	378	400	424	433
Sault Ste. Marie.....	23,082	613	574	648	564	493	532	554
Stratford.....	17,742	384	340	330	307	320	350	348
Sudbury.....	18,518	498	797	796	717	767	876	979
Timmins.....	14,200	491	563	519	545	590	631	687
Toronto.....	631,207	12,210	11,436	12,095	11,286	10,615	10,474	10,391
Welland.....	10,709	288	286	275	292	254	308	313
Windsor ¹	98,179	2,791	2,037	1,977	1,923	1,901	2,032	2,111
Woodstock.....	11,395	246	237	242	246	214	224	236
Manitoba—								
Brandon.....	16,461 ²	390	303	314	297	270	264	250
St. Boniface.....	16,275 ²	843	1,064	1,147	1,028	1,024	1,104	1,129
Winnipeg.....	215,814 ²	4,527	3,944	4,087	3,786	3,728	3,668	3,559
Saskatchewan—								
Moose Jaw.....	19,805 ²	623	464	492	463	426	427	450
Prince Albert.....	11,049 ²	334	398	359	363	438	469	435
Regina.....	53,354 ²	1,368	1,270	1,262	1,174	1,231	1,172	1,145
Saskatoon.....	41,734 ²	1,058	955	1,009	892	857	872	886

¹ Includes East Windsor, Sandwich, and Walkerville.² Census of 1936.

2.—Live Births in Cities and Towns of 10,000 Population and Over, 1932-36, with Averages, 1926-30 and 1931-35—concluded.

Province and City or Town.	Census Population, 1931.	Averages, 1926-30.	Averages, 1931-35.	1932.	1933.	1934.	1935.	1936.
Alberta—								
Calgary.....	83,407 ¹	1,806	1,695	1,726	1,624	1,601	1,640	1,623
Edmonton.....	85,774 ¹	2,122	2,246	2,320	2,085	2,148	2,278	2,317
Lethbridge.....	13,523 ¹	436	531	526	517	458	582	580
British Columbia—								
New Westminster.....	17,524	525	558	565	535	544	558	639
Vancouver.....	246,593	3,776	3,357	3,450	3,188	3,179	3,248	3,410
Victoria.....	39,082	717	696	700	674	714	709	710

¹ Census of 1936.

Nativity of Mothers.—Table 3 shows, by provinces, the percentages of legitimate children born alive to Canadian-born, British-born, and foreign-born mothers, respectively, for the years 1934, 1935, and 1936. The influence of the limited immigration in recent years is reflected in the figures. In the Prairie Provinces of Manitoba, Saskatchewan, and Alberta, where the percentages born to foreign-born mothers in 1933 were 25.9, 36.3, and 40.4, respectively, they were 20.4, 28.6, and 32.0, respectively, in 1936. Thus more and more of the children of the West are coming within the class of third generation Canadian.

3.—Percentages of Legitimate Children Born Alive to Canadian-Born, British-Born or Foreign-Born Mothers, by Provinces, 1934-36.

Province.	Nativity of Mothers.								
	Canadian Born.			British Born.			Foreign Born.		
	1934.	1935.	1936.	1934.	1935.	1936.	1934.	1935.	1936.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Prince Edward Island.....	94.9	94.2	94.3	1.3	1.4	1.5	3.7	4.4	4.1
Nova Scotia.....	88.9	88.4	89.2	7.5	8.0	7.4	3.6	3.6	3.3
New Brunswick.....	93.1	93.8	93.7	3.0	2.5	2.5	4.0	3.7	3.8
Quebec.....	94.3	94.7	95.3	2.1	2.0	1.8	3.6	3.3	2.9
Ontario.....	74.4	76.2	77.8	15.3	14.0	12.9	10.3	9.8	9.3
Manitoba.....	66.7	69.0	71.6	9.9	9.2	8.0	23.4	21.8	20.4
Saskatchewan.....	58.2	62.2	64.8	8.4	7.4	6.6	33.4	30.5	28.6
Alberta.....	51.4	54.8	58.1	12.0	10.6	9.9	36.7	34.6	32.0
British Columbia.....	55.4	58.4	63.1	22.1	20.5	18.3	22.5	21.1	18.6
Canada¹.....	78.6	80.1	81.7	8.7	8.1	7.4	12.6	11.8	10.9

¹ Exclusive of the Territories.

Fertility Rates.—The crude birth rate of a young country is subject to influences which vitiate comparison with older lands. These influences are the result, to some extent, of differences in age or sex constitution or in conjugal condition. For this reason birth rates are frequently based on the number of births per thousand women within suitably chosen age-groups. Such rates are commonly known as fertility rates. At pp. 150-152 of the 1936 Year Book specific fertility rates of married women between the ages of 15 and 49 years were given, by provinces, for 1921, 1922, and 1930-32. Such statistics will not again be compiled until 1941 census data are available, and the interested reader is referred to that table for this information.

Multiple Births in Canada.—During the eleven-year period 1926-36, out of a total of 2,591,395, recorded confinements, 31,316 or 1 in 82.7 were multiple confinements. Of these 31,000 were twin and 314 were triplet confinements, while one, in British Columbia in 1931, was a quadruplet confinement from which all the children died within a few hours of birth. The remaining multiple confinement resulted in the birth of the Dionne quintuplets (May 28, 1934).

Table 4 shows the incidence of multiple births in each year from 1926 to 1936. In 1936 one in every 86 confinements was a twin confinement, a proportion which is fairly representative for the other years as well. There were only 31 triplet confinements in 1936. Of the children born alive or dead one in every 43 was the product of a multiple confinement. For children born alive the proportion was one in 44 and for children stillborn one in 21. In the multiple confinements stillborn children formed 5.6 p.c. of the total births as against 2.7 p.c. in single confinements.

4.—Live Births and Stillbirths Classified as Single and Multiple, by Sex, 1926-36.

Year and Sex.	Total Births.		Single Births.		Twins.			Triplets.		
	Born Alive.	Still-born.	Born Alive.	Still-born.	No.	Children.		No.	Children.	
						Born Alive.	Still-born.		Born Alive.	Still-born.
1926—										
Total.....	232,750	7,105	227,084	6,723	2,970	5,562	378	36	104	4
Male.....	119,863	4,116	117,081	3,899	—	2,726	217	—	56	—
Female....	112,887	2,989	110,003	2,824	—	2,836	161	—	48	4
1927—										
Total.....	234,188	7,336	228,578	6,952	2,940	5,502	378	38	108	6
Male.....	120,655	4,232	117,854	4,019	—	2,754	210	—	47	3
Female....	113,533	3,104	110,724	2,933	—	2,748	168	—	61	3
1928—										
Total.....	236,757	7,577	231,188	7,114	2,965	5,480	450	34	89	13
Male.....	121,505	4,417	118,674	4,154	—	2,786	254	—	45	9
Female....	115,252	3,160	112,514	2,960	—	2,694	196	—	44	4
1929—										
Total.....	235,415	7,566	229,848	7,150	2,939	5,474	404	35	93	12
Male.....	120,891	4,354	118,105	4,104	—	2,751	241	—	35	9
Female....	114,524	3,212	111,743	3,046	—	2,723	163	—	58	3
1930—										
Total.....	243,495	7,707	238,056	7,283	2,900	5,386	414	21	53	10
Male.....	124,852	4,397	122,053	4,146	—	2,769	246	—	30	5
Female....	118,643	3,310	116,003	3,137	—	2,617	168	—	23	5
1931—										
Total.....	240,473 ¹	7,619	234,845	7,248	2,966	5,568	364	21	56	7
Male.....	123,622	4,339	120,853	4,125	—	2,741	210	—	28	4
Female....	116,851 ¹	3,280	113,992	3,123	—	2,827	154	—	28	3
1932—										
Total.....	235,666	7,284	230,302	6,960	2,817	5,311	323	18	53	1
Male.....	121,082	4,130	118,396	3,949	—	2,666	181	—	20	—
Female....	114,584	3,154	111,906	3,011	—	2,645	142	—	33	1
1933—										
Total.....	222,868	6,848	217,812	6,510	2,655	4,979	331	28	77	7
Male.....	114,388	3,887	111,807	3,695	—	2,537	191	—	44	1
Female....	108,480	2,961	106,005	2,815	—	2,442	140	—	33	6
1934—										
Total.....	221,303 ²	6,452	216,230	6,150	2,658	5,018	298	18	50	4
Male.....	113,323	3,636	110,776	3,470	—	2,525	165	—	22	1
Female....	107,980 ²	2,816	105,454	2,680	—	2,493	133	—	28	3
1935—										
Total.....	221,451	6,449	216,482	6,136	2,590	4,872	308	34	97	5
Male.....	113,293	3,646	110,763	3,468	—	2,473	175	—	57	3
Female....	108,158	2,803	105,719	2,668	—	2,399	133	—	40	2
1936—										
Total.....	220,371	6,350	215,377	6,051	2,600	4,913	287	31	81	12
Male.....	113,289	3,605	110,722	3,433	—	2,528	162	—	39	10
Female....	107,082	2,745	104,655	2,618	—	2,385	125	—	42	2

¹ Including 4 females born alive in a quadruplet confinement, all females, born alive.

² Including Dionne quintuplets,

Ages of Parents.—Table 5 shows the age distribution of married fathers and mothers in 1926 (the first year for which the figures are available for the whole of Canada) and for the years 1933-35. The fathers and mothers in each of these years are arranged according to age and then divided into four equal groups. Each point of age at which a separation comes is called a quartile. To obtain these points of age it is assumed that those in the same year of age are evenly distributed from its lower to its upper limit. In similar manner the deciles divide fathers or mothers in each year into ten equal groups.

In 1935 one-quarter of the married fathers were under 27·99 years of age, one-half under 32·62 years and three-quarters under 38·56 years. One-quarter of the married mothers were under 24·12 years of age, one-half under 28·41 years and three-quarters under 33·71 years. Nine-tenths of the fathers were under 44·22 years and nine-tenths of the mothers under 38·36 years. It will be noted that in every case, except in the ninth decile for fathers, the 1926 figure is appreciably greater than that for 1935. In other words, parents, generally speaking, are somewhat younger than in 1926, although for brief intervening periods the trend has been reversed.

**5.—Quartile and Decile Ages of Married Fathers and Mothers, in Canada,
1926, 1933-35.**

Position in Array, by Age.	Fathers.				Mothers.			
	1926.	1933.	1934.	1935.	1926.	1933.	1934.	1935.
	Years.	Years.	Years.	Years.	Years.	Years.	Years.	Years.
First quartiles.....	28·35	27·97	28·04	27·99	24·43	24·17	24·22	24·12
Second quartiles.....	33·31	32·77	32·78	32·62	28·89	28·45	28·52	28·41
Third quartiles.....	39·01	38·74	38·72	38·56	34·26	33·79	33·91	33·71
First deciles.....	24·91	24·69	24·74	24·72	21·41	21·25	21·29	21·25
Second deciles.....	27·28	26·98	27·04	27·01	23·50	23·28	23·32	23·24
Third deciles.....	29·35	28·88	28·95	28·88	25·34	25·02	25·07	24·99
Fourth deciles.....	31·28	30·71	30·76	30·67	27·79	26·69	26·78	26·68
Fifth deciles.....	33·31	32·77	32·78	32·62	28·89	28·45	28·52	28·41
Sixth deciles.....	35·48	34·83	34·81	34·77	30·82	30·36	30·39	30·26
Seventh deciles.....	37·81	37·38	37·35	37·16	33·41	32·65	32·66	32·47
Eighth deciles.....	40·40	40·21	40·22	40·07	35·61	35·20	35·17	35·08
Ninth deciles.....	44·19	44·26	44·33	44·22	38·69	38·45	38·51	38·36

Birthplaces of Parents.—Table 6 classifies the children born in 1935 and 1936 by country of birth of parents, and furnishes some idea to what extent the coming generation of Canadian born will be the offspring of Canadian-born, British-born or foreign-born parents. The term "country not specified", under country of birth, includes for the father illegitimate births and births of incomplete record, while for the mother it includes births of incomplete record only. Between 1926 and 1936 the percentage of births for which both parents were born in Canada rose from 61·4 in 1926 to 66·4 and 67·8 for 1935 and 1936, respectively.

6.—Numbers and Percentages of Births (Exclusive of Stillbirths) in Canada to Fathers and Mothers Born in Specified Countries, 1935 and 1936.

Country of Birth of Parents.		Numbers of Births with Father, Mother, or Both Parents Born in Specified Country.			Percentages of Births with Father, Mother, or Both Parents Born in Specified Country.		
		Father.	Mother.	Both Parents.	Father.	Mother.	Both Parents.
Canada.....	1935	160,241	177,077	147,077	72.4	80.0	66.4
	1936	162,127	179,757	149,410	73.6	81.6	67.8
England.....	1935	12,109	9,865	3,721	5.5	4.5	1.7
	1936	11,382	9,008	3,176	5.2	4.1	1.4
Ireland.....	1935	2,181	1,666	627	1.0	0.8	0.3
	1936	1,995	1,466	531	0.9	0.7	0.2
Scotland.....	1935	4,762	4,626	1,579	2.2	2.1	0.7
	1936	4,611	4,074	1,284	2.1	1.8	0.6
Wales.....	1935	566	368	70	0.3	0.2	1
	1936	455	351	60	0.2	0.2	1
Other British Isles.....	1935	60	41	4	1	1	1
	1936	59	35	5	1	1	1
Newfoundland.....	1935	881	879	353	0.4	0.4	0.2
	1936	846	802	319	0.4	0.4	0.1
Other British Empire.....	1935	433	282	118	0.2	0.1	0.1
	1936	391	324	113	0.2	0.1	0.1
Austria.....	1935	2,110	1,390	1,009	1.0	0.6	0.5
	1936	1,898	1,182	837	0.9	0.5	0.4
Belgium.....	1935	482	360	214	0.2	0.2	0.1
	1936	439	307	178	0.2	0.1	0.1
Finland.....	1935	437	460	311	0.2	0.2	0.1
	1936	411	428	276	0.2	0.2	0.1
France.....	1935	333	219	77	0.2	0.1	1
	1936	284	217	63	0.1	0.1	1
Germany.....	1935	1,130	833	428	0.5	0.4	0.2
	1936	1,013	678	328	0.5	0.3	0.1
Hungary.....	1935	957	787	663	0.4	0.4	0.3
	1936	809	673	553	0.4	0.3	0.3
Italy.....	1935	1,660	1,009	914	0.7	0.5	0.4
	1936	1,464	868	780	0.7	0.4	0.4
Norway.....	1935	704	402	228	0.3	0.2	0.1
	1936	746	394	205	0.3	0.2	0.1
Poland.....	1935	5,068	4,254	3,240	2.3	1.9	1.5
	1936	4,802	3,987	2,989	2.2	1.8	1.4
Russia ²	1935	4,163	3,373	2,276	1.9	1.5	1.0
	1936	3,944	2,968	2,069	1.8	1.3	0.9
Sweden.....	1935	775	366	183	0.3	0.2	0.1
	1936	749	307	136	0.3	0.1	0.1
Other European Countries.....	1935	3,828	2,519	1,874	1.7	1.1	0.8
	1936	3,548	2,307	1,689	1.6	1.0	0.8
China and Japan.....	1935	708	535	481	0.3	0.2	0.2
	1936	700	495	450	0.3	0.2	0.2
Other Asiatic Countries.....	1935	198	124	107	0.1	0.1	1
	1936	183	89	72	0.1	1	1
United States.....	1935	8,983	8,886	2,264	4.1	4.0	1.0
	1936	8,647	8,531	2,138	3.9	3.9	1.0
Country not specified.....	1935	8,682	1,130	192	3.9	0.5	0.1
	1936	8,868	1,123	82	4.0	0.5	1
Totals.....	1935	221,451	221,451	168,010³	100.0	100.0	75.9⁴
	1936	220,371	220,371	167,743³	100.0	100.0	76.1⁴

¹ Less than one-tenth of one per cent. ² Includes the Ukraine. ³ This figure gives the number of children whose fathers and mothers were born in the same country. The difference between this figure and the total number of births represents the number of children whose fathers and mothers were born in different countries.

⁴ This excludes the percentage of "mixed parentage", i.e., where the two parents were not born in the same country.

Origins of Parents.—Table 7 gives the numbers and percentages of births during 1935 and 1936, distributed by the principal origins.

7.—Numbers and Percentages of Births (Exclusive of Stillbirths) in Canada to Fathers and Mothers of Specified Origins, 1935 and 1936.

Origin of Parents.		Numbers of Births with Father, Mother, or Both Parents of Specified Origin.			Percentages of Births with Father, Mother, or Both Parents of Specified Origin.		
		Father.	Mother.	Both Parents.	Father.	Mother.	Both Parents.
English.....	1935	44,302	47,192	28,794	20.0	21.3	13.0
	1936	44,114	46,857	28,277	20.0	21.3	12.8
Irish.....	1935	20,109	19,484	7,822	9.1	8.8	3.5
	1936	20,108	19,608	7,789	9.1	8.9	3.5
Scottish.....	1935	20,472	20,661	8,166	9.2	9.3	3.7
	1936	20,219	20,300	7,819	9.2	9.2	3.5
Welsh.....	1935	936	739	101	0.4	0.3	1
	1936	942	732	84	0.4	0.3	1
French.....	1935	83,386	87,052	78,612	37.7	39.3	35.5
	1936	83,545	87,169	78,665	37.9	39.6	35.7
German.....	1935	11,627	12,266	8,034	5.3	5.5	3.6
	1936	11,253	11,983	7,534	5.1	5.4	3.4
Armenian.....	1935	42	36	33	1	1	1
	1936	33	23	20	1	1	1
Austrian.....	1935	634	664	372	0.3	0.3	0.2
	1936	578	591	295	0.3	0.3	0.1
Belgian.....	1935	622	601	312	0.3	0.3	0.1
	1936	588	565	270	0.3	0.3	0.1
Bulgarian.....	1935	46	19	15	1	1	1
	1936	45	28	19	1	1	1
Chinese.....	1935	212	163	156	0.1	0.1	0.1
	1936	206	169	163	0.1	0.1	0.1
Czech and Slovak.....	1935	774	727	570	0.3	0.3	0.3
	1936	757	753	562	0.3	0.3	0.3
Danish.....	1935	811	569	238	0.4	0.3	0.1
	1936	788	547	237	0.4	0.2	0.1
Dutch.....	1935	2,669	2,524	1,289	1.2	1.1	0.6
	1936	2,644	2,608	1,314	1.2	1.2	0.6
Finnish.....	1935	524	731	451	0.2	0.3	0.2
	1936	541	734	443	0.2	0.3	0.2
Greek.....	1935	186	127	105	0.1	0.1	1
	1936	192	124	104	0.1	0.1	1
Hebrew.....	1935	2,155	2,128	2,063	1.0	1.0	0.9
	1936	2,132	2,120	2,045	1.0	1.0	0.9
Hindu.....	1935	55	51	51	1	1	1
	1936	50	50	49	1	1	1
Hungarian.....	1935	1,022	1,060	869	0.5	0.5	0.4
	1936	914	938	742	0.4	0.4	0.3
Icelandic.....	1935	390	388	214	0.2	0.2	0.1
	1936	362	377	181	0.2	0.2	0.1
Indian.....	1935	3,506	4,074	3,343	1.6	1.8	1.5
	1936	3,508	4,136	3,355	1.6	1.9	1.5
Italian.....	1935	2,169	1,818	1,517	1.0	0.8	0.7
	1936	2,023	1,734	1,387	0.9	0.8	0.6
Japanese.....	1935	561	554	552	0.3	0.3	0.2
	1936	573	571	568	0.3	0.3	0.3
Negro.....	1935	375	434	334	0.2	0.2	0.2
	1936	388	452	342	0.2	0.2	0.2
Norwegian.....	1935	1,700	1,759	655	0.8	0.8	0.3
	1936	1,786	1,887	668	0.8	0.9	0.3
Polish.....	1935	2,894	3,231	2,042	1.3	1.5	0.9
	1936	2,789	3,184	1,926	1.3	1.4	0.9
Roumanian.....	1935	454	462	288	0.2	0.2	0.1
	1936	449	417	242	0.2	0.2	0.1
Russian.....	1935	1,311	1,265	864	0.6	0.6	0.4
	1936	1,339	1,247	841	0.6	0.6	0.4
Serbo-Croatian.....	1935	431	387	325	0.2	0.2	0.1
	1936	417	369	316	0.2	0.2	0.1
Swedish.....	1935	1,505	1,436	477	0.7	0.6	0.2
	1936	1,492	1,377	420	0.7	0.6	0.2
Swiss.....	1935	331	222	77	0.1	0.1	1
	1936	279	203	43	0.1	0.1	1
Syrian.....	1935	208	169	128	0.1	0.1	0.1
	1936	214	167	125	0.1	0.1	0.1
Ukrainian ²	1935	5,992	6,838	5,326	2.7	3.1	2.4
	1936	5,842	6,731	5,164	2.7	3.1	2.3

For footnotes, see end of table, p. 166.

7.—Numbers and Percentages of Births (Exclusive of Stillbirths) in Canada to Fathers and Mothers of Specified Origins, 1935 and 1936—concluded.

Origin of Parents.		Numbers of Births with Father, Mother, or Both Parents of Specified Origin.			Percentages of Births with Father, Mother, or Both Parents of Specified Origin.		
		Father.	Mother.	Both Parents.	Father.	Mother.	Both Parents.
Other.....	1935	264	260	127	0.1	0.1	0.1
	1936	249	260	125	0.1	0.1	0.1
Origin not specified.....	1935	8,776	1,360	296	4.0	0.6	0.1
	1936	9,012	1,360	217	4.1	0.6	0.1
Totals.....	1935	221,451	221,451	154,618¹	100.0	100.0	69.8⁴
	1936	220,371	220,371	152,351²	100.0	100.0	69.1⁴

¹ Less than one-tenth of one per cent.

² Including "Galician" and "Bukovinian".

³ This

figure gives the number of children whose fathers and mothers have the same origin. The difference between this figure and the total number of births represents the number of children whose fathers and mothers are of different origins.

⁴ This excludes the percentage of "mixed parentage", i.e., parents not of the same origin.

Illegitimacy.—The ratio of illegitimate to total births is, generally speaking, low in Canada as compared with other countries. The steady increase which is noticeable in recent years is probably due, in some measure, to more complete data.

Out of 221,451 live births in the nine provinces of Canada in 1935, 8,344, or 3.77 p.c., were returned as the issue of unmarried mothers. Figures for 1936 show a total of 220,371 live births, of which 8,633, or 3.92 p.c., were returned as the issue of unmarried mothers. Out of this number, 4,492 were males and 4,141 females—a ratio of 1,085 males to every 1,000 females, as compared with 1,069 males per 1,000 females in 1935, and a general 1936 rate for all live births of 1,058 males to 1,000 females. (See Table 8.)

8.—Numbers of Illegitimate Births, Classified by Age of Mother, by Provinces, 1936, Percentages to Total Live Births, and Totals of Illegitimate Births, by Sex, 1934, 1935 and 1936, with Averages or Totals, 1926-36.

Age Group of Mother and Item.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada. ¹
1936.										
Under 15 years.....	1	4	4	9	29	5	4	2	3	61
15-19 years.....	31	268	144	488	905	141	221	186	113	2,497
20-24 years.....	22	285	172	553	1,094	201	289	227	142	2,985
25-29 years.....	9	96	45	193	419	78	106	98	64	1,108
30-34 years.....	3	41	22	64	186	23	33	47	30	449
35-39 years.....	2	23	15	33	93	24	40	32	15	277
40-44 years.....	Nil	5	3	4	15	8	8	5	5	89
45 years or over.....	Nil	1	Nil	1	2	Nil	1	6	2	13
Not given.....	Nil	Nil	Nil	1,124	19	6	1	1	3	1,154
Av. 1926-30.....	42	558	299	2,334	2,196	501	489	479	240	7,138
Av. 1931-35.....	74	652	373	2,431	2,707	501	651	613	330	8,332
Totals—										
1934.....	84	659	367	2,335	2,500	512	678	589	346	8,070
1935.....	83	663	403	2,506	2,642	473	640	614	320	8,344
1936.....	68	723	405	2,469	2,788	493	703	607	377	8,633
Percentages of All Live Births—	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1934.....	4.3	5.8	3.6	3.1	4.0	3.8	3.4	3.6	3.5	3.65
1935.....	4.1	5.7	3.9	3.3	4.2	3.5	3.3	3.8	3.2	3.77
1936.....	3.4	6.1	3.9	3.3	4.5	3.8	3.7	3.8	3.6	3.92
Male Illegitimate Births—	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1934.....	47	340	191	1,231	1,272	243	333	296	179	4,132
1935.....	37	341	218	1,298	1,368	237	329	314	169	4,311
1936.....	36	394	198	1,302	1,446	248	375	304	189	4,492
Female Illegitimate Births—										
1934.....	37	319	176	1,104	1,228	269	345	293	167	3,938
1935.....	46	322	185	1,208	1,274	236	311	300	151	4,033
1936.....	32	329	207	1,167	1,342	245	328	303	188	4,141

¹ Exclusive of the Territories.

Stillbirths.—Statistics of the number of children born dead in 1936 are shown below for Canada, according to the status and age of the mother. Stillbirths to unmarried mothers were 3·7 p.c. of total illegitimate births in 1936, whereas total stillbirths were only 2·8 p.c. of total births in the same year.

9.—Stillbirths, Classified by Age of Mother, by Provinces and Legitimacy of Child, 1936, with Averages or Totals, 1926-36, and Ratios to Totals, 1934, 1935 and 1936.

Age Group of Mother and Item.	Born to All Mothers.										Born to Unmarried Mothers.
	Canada. ¹	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	
1936.											
Under 15 years.....	1	Nil	Nil	Nil	Nil	Nil	Nil	1	Nil	Nil	1
15-19 years.....	316	3	27	21	81	118	14	18	22	12	81
20-24 years.....	1,355	25	71	63	420	454	62	109	93	58	96
25-29 years.....	1,528	16	56	52	585	492	81	89	94	63	40
30-34 years.....	1,256	5	45	40	481	410	69	90	75	41	17
35-39 years.....	1,076	11	55	44	444	330	49	71	45	27	18
40-44 years.....	645	10	32	14	250	188	45	48	37	21	8
45 years or over.....	80	Nil	4	2	38	24	3	3	6	Nil	1
Not given.....	93	Nil	2	1	66	18	Nil	2	4	Nil	71
Av. 1926-30.....	7,458	43	365	283	2,212	2,761	479	551	467	297	356
Av. 1931-35.....	6,931	67	401	302	2,337	2,284	383	488	421	247	381
Totals—											
1934.....	6,452	67	350	284	2,232	2,091	369	465	363	231	354
1935.....	6,449	67	342	266	2,317	2,140	331	405	363	218	348
1936.....	6,350	70	292	237	2,365	2,034	323	431	376	222	333
Ratios to Total Births											
1934.....	2·8	3·3	3·0	2·7	2·8	3·3	2·7	2·3	2·2	2·3	4·2
1935.....	2·8	3·2	2·9	2·5	3·0	3·3	2·4	2·0	2·2	2·1	4·0
1936.....	2·8	3·4	2·4	2·2	3·0	3·2	2·5	2·2	2·3	2·1	3·7

¹ Exclusive of the Territories.

Birth Rates in Various Countries.—The relative positions occupied by Canada and its individual provinces among various countries of the world with respect to crude birth rate (the annual number of births per 1,000 of population) are shown in Table 10.

10.—Crude Birth Rates of Various Countries of the World and of Provinces of Canada in Recent Years.

Country.	Year.	Crude Birth Rate.	Country.	Year.	Crude Birth Rate.
Country—			Country—continued.		
Palestine.....	1935	45·2	Italy.....	1935	23·3
Costa Rica.....	1935	43·2	Newfoundland.....	1935	22·4
Egypt.....	1935	41·9	Iceland.....	1935	22·1
Straits Settlements.....	1935	41·8	Hungary.....	1935	21·2
Salvador.....	1934	39·8	Uruguay.....	1935	20·4
British India.....	1935	34·9	Netherlands.....	1935	20·2
Ceylon.....	1935	34·4	Canada	1936	20·0
Chile.....	1935	34·1	Irish Free State.....	1935	19·6
Jamaica.....	1935	33·5	Northern Ireland.....	1935	19·2
Japan.....	1935	31·6	Germany.....	1935	18·9
Roumania.....	1935	30·7	Finland.....	1935	18·5
Greece.....	1935	28·3	Czechoslovakia.....	1935	17·9
Panama.....	1934	27·1	Scotland.....	1935	17·8
Bulgaria.....	1935	26·3	Denmark.....	1935	17·7
Poland.....	1935	26·1	Latvia.....	1935	17·6
Spain.....	1935	25·2	United States (reg. area).....	1935	16·9
Union of South Africa (whites).....	1935	24·2	Australia.....	1935	16·6
Lithuania.....	1935	23·4	New Zealand.....	1935	16·1

10.—Crude Birth Rates of Various Countries of the World and of Provinces of Canada in Recent Years—concluded.

Country.	Year.	Crude Birth Rate.	Province.	Year.	Crude Birth Rate.
Country—concluded.			Province of Canada—		
Switzerland.....	1935	16.0	Quebec.....	1936	24.3
Estonia.....	1935	15.9	New Brunswick.....	1936	24.2
Belgium.....	1935	15.5	Nova Scotia.....	1936	22.0
British Isles.....	1935	15.4	Prince Edward Island.....	1936	21.5
France.....	1935	15.2	Saskatchewan.....	1936	20.5
England and Wales.....	1935	14.7	Alberta.....	1936	20.4
Norway.....	1935	14.3	Manitoba.....	1936	18.1
Sweden.....	1935	13.8	Ontario.....	1936	16.9
Austria.....	1935	13.2	British Columbia.....	1936	14.1

Section 2.—Marriages and Divorces.

Subsection 1.—Marriages.

The marriage rate in modern countries of the western world is appreciably influenced by the general level of prosperity prevailing. Marriages in such English-speaking countries, for instance, as the United Kingdom, the United States, Canada, and Australia tend to increase in "good times" and to diminish in "hard times", when great numbers of those who are contemplating marriage are led to postpone the event. Thus an examination of the figures for individual years over the past decade clearly shows that marriages reached a peak in 1929 after which the recession was steady and marked until 1932; for 1933 there was an improvement, though of little more than 2 p.c. over 1932, for 1934 a further improvement of over 14 p.c. was recorded, and the improvement continued in 1935 and 1936. This general trend for Canada as a whole was followed in the figures for each province, although in the cases of Prince Edward Island and Alberta the large increases in 1934 were not held in the following year.

Summary statistics of marriages and marriage rates, 1934-36, with averages for 1921-25, 1926-30, and 1931-35, are given in Table 13, p. 170 and in Table 32, p. 191.

Age at Marriage.—The average age of all bridegrooms in the Dominion in 1935 was 29.0 years and that of all brides 25.0 years. The average excess of the bridegroom's age was thus 4.0 years. It may be noted in Table 11 that when the contracting parties are grouped by age of bridegroom, the average difference in age is less for the younger groups, grooms under 20 being 0.4 years younger than the brides, while the excess of the average bridegroom's age was 1.5 years in the group 20-24, and steadily increased for each quinquennial age group until it was 11.3 years for the bridegrooms 50 years or over in 1935. On the other hand, when the parties are grouped by the age of the bride, the same regularity is not shown. In the case of brides in the age groups 25-29 years and 30-34 years, the bridegrooms approximate most closely in age to their brides. Since these tables are based upon all marriages contracted during the year, the figures given should not be understood to signify the average ages at *first* marriage. Out of each 1,000 bridegrooms in 1936, 930 were bachelors, 60 widowers, 11 divorced men; out of each 1,000 brides, 954 were spinsters, 37 widows, 9 divorced women. The first year in which as many as 1 p.c. of those marrying had previously been divorced was 1928. The comparison between the figures of divorces granted, as shown in Table 15 of this chapter, and the number of divorced persons re-married is of some interest.

Thus 1,526 divorces were granted in 1936, while 851 divorced males and 727 divorced females married again. This, of course, does not mean that these were the same persons. Table 12 gives the average ages of brides and grooms by provinces.

11.—Differences in Ages of Bridegrooms and Brides, 1935.

Age Group of Bridegrooms.	Average Age of Bridegrooms.	Average Age of Brides.	Excess of Average Age of Bridegrooms.	Age Group of Brides.	Average Age of Brides.	Average Age of Bridegrooms.	Excess of Average Age of Bridegrooms.
All bridegrooms....	29.0	25.0	4.0	All brides.....	25.0	29.0	4.0
Under 20 years.....	19.1	19.5	-0.4	Under 20 years.....	18.5	24.6	6.1
20-24 years.....	22.9	21.4	1.5	20-24 years.....	22.4	26.6	4.2
25-29 years.....	27.3	23.7	3.6	25-29 years.....	27.1	29.9	2.8
30-34 years.....	32.1	26.1	6.0	30-34 years.....	32.1	34.5	2.4
35-39 years.....	37.2	28.8	8.4	35-39 years.....	37.2	40.5	3.3
40-44 years.....	42.2	32.3	9.9	40-44 years.....	42.3	46.7	4.4
45-49 years.....	47.4	36.9	10.5	45-49 years.....	47.3	51.8	4.5
50 years or over....	59.7	48.4	11.3	50 years or over....	58.7	61.1	2.4

12.—Average Ages of Parties Contracting Marriage, by Provinces, 1934 and 1935.

Province.	1934.			1935.		
	Average Age of Bridegrooms.	Average Age of Brides.	Excess of Average Age of Bridegrooms.	Average Age of Bridegrooms.	Average Age of Brides.	Excess of Average Age of Bridegrooms.
Prince Edward Island.....	29.7	24.8	4.9	29.4	25.0	4.4
Nova Scotia.....	28.6	24.4	4.2	28.6	24.3	4.3
New Brunswick.....	28.7	24.2	4.5	28.4	24.2	4.2
Quebec.....	29.2	25.5	3.7	29.2	25.6	3.6
Ontario.....	28.9	25.0	3.9	28.8	25.0	3.8
Manitoba.....	29.3	24.6	4.7	29.5	24.8	4.7
Saskatchewan.....	28.7	23.4	5.3	28.7	23.7	5.0
Alberta.....	29.3	23.9	5.4	29.2	24.1	5.1
British Columbia.....	30.3	25.6	4.7	30.2	25.7	4.5
Canada (Exclusive of the Territories).....	29.1	24.9	4.2	29.0	25.0	4.0

Nativity of Brides and Bridegrooms.—The majority of marriages contracted in the western provinces in past years were between persons born outside Canada. This condition, however, is being quickly changed and such percentages in all the western provinces show a general reduction over the past few years. (See Table 13.) Both Canadian-born brides and bridegrooms are now in the majority in each province, and in the Maritime Provinces and Quebec they show a marked predominance. Taking Canada as a whole, nearly 79 p.c. of all grooms and over 86 p.c. of all brides in 1936 were born in Canada; these are the highest percentages shown for the period covered by the statistics.

13.—Percentage Distribution by Nativity of Persons Married in Canada, by Provinces, 1934, 1935, and 1936, with Averages for 1921-25, 1926-30, and 1931-35.

NOTE.—For figures for single years 1921-25, see the 1929 Year Book, p. 166; for 1926-30, the 1933 Year Book, pp. 163-164; and for 1931-33, the 1936 Year Book, p. 164.

Province.	Year.	Marriages.		Percentage Distribution of Grooms and Brides, by Nativity.					
		Total.	Per 1,000 Population.	Born in Province of Residence.		Born in Other Provinces.		Born Elsewhere.	
				Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.
		No.	No.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Prince Edward Island	Av. 1921-25	473	5.4	90.8	93.8	5.1	2.6	4.1	3.7
	Av. 1926-30	473	5.4	90.8	93.5	4.1	2.9	5.1	3.6
	Av. 1931-35	496	5.6	89.7	92.6	4.7	3.6	5.6	3.8
	1934	536	6.0	89.2	91.8	4.5	2.8	6.3	5.4
	1935	516	5.8	90.3	93.6	4.5	3.3	5.2	3.1
	1936	595	6.5	87.1	90.9	5.7	5.2	7.2	3.9
Nova Scotia.....	Av. 1921-25	3,186	6.1	78.2	83.2	5.6	3.4	16.3	13.4
	Av. 1926-30	3,224	6.3	78.7	84.0	5.0	3.6	16.3	12.4
	Av. 1931-35	3,522	6.8	81.8	87.1	5.4	4.1	12.8	8.8
	1934	3,756	7.2	83.5	88.4	4.9	3.9	11.6	7.7
	1935	3,946	7.5	82.8	87.3	5.5	4.7	11.6	8.0
	1936	4,129	7.7	84.5	88.5	5.5	4.0	9.9	7.5
New Brunswick.....	Av. 1921-25	2,953	7.6	72.4	77.0	10.5	8.0	17.2	14.9
	Av. 1926-30	2,970	7.4	72.7	76.8	9.2	8.1	18.2	15.0
	Av. 1931-35	2,737	6.5	78.7	83.2	9.9	8.3	11.4	8.5
	1934	3,045	7.2	79.2	84.2	10.0	7.8	10.8	8.0
	1935	3,200	7.5	79.8	85.3	9.6	7.4	10.6	7.3
	1936	3,397	7.8	81.6	86.3	8.0	6.8	10.4	7.0
Quebec ¹	Av. 1926-30	18,731	6.9	80.6	83.5	4.0	3.5	15.4	13.0
	Av. 1931-35	17,089	5.8	81.3	84.7	4.2	4.0	14.5	11.3
	1934	18,242	6.0	83.2	86.7	4.3	3.8	12.4	9.5
	1935	19,967	6.5	84.5	87.6	4.3	4.4	11.2	8.0
	1936	21,654	7.0	85.8	89.1	4.3	4.0	9.9	6.8
Ontario.....	Av. 1921-25	24,037	8.0	61.0	64.5	6.7	5.8	32.4	29.6
	Av. 1926-30	25,449	7.8	57.2	61.9	7.3	6.8	35.5	31.3
	Av. 1931-35	24,260	6.8	62.9	69.5	7.0	7.4	30.1	23.1
	1934	25,874	7.1	65.3	72.6	6.9	7.2	27.8	20.2
	1935	26,843	7.3	71.0	77.5	5.6	6.1	23.4	16.4
	1936	27,734	7.5	74.0	79.6	5.3	5.9	20.7	14.5
Manitoba.....	Av. 1921-25	4,634	7.5	28.4	40.8	16.9	13.1	54.7	46.1
	Av. 1926-30	4,951	7.5	35.9	49.4	13.2	10.9	50.9	39.7
	Av. 1931-35	5,015	7.1	48.4	62.7	11.5	10.8	40.1	26.5
	1934	5,296	7.4	52.4	66.7	12.2	11.3	35.4	22.0
	1935	5,341	7.5	56.1	69.0	12.0	11.7	31.9	19.3
	1936	5,756	8.1	57.6	70.7	12.2	11.4	30.2	17.9
Saskatchewan.....	Av. 1921-25	4,982	6.4	9.7	21.0	30.5	26.7	59.8	52.3
	Av. 1926-30	6,036	7.0	18.6	35.9	26.5	21.2	54.9	42.9
	Av. 1931-35	5,680	6.1	36.7	59.5	20.4	15.0	42.9	25.5
	1934	5,519	5.9	41.7	66.2	19.5	13.9	38.8	19.9
	1935	6,036	6.5	45.5	67.1	18.7	14.1	35.8	18.9
Alberta.....	1936	6,168	6.6	48.3	71.0	18.8	12.7	32.9	16.2
	Av. 1921-25	4,313	7.3	9.8	19.2	25.1	22.9	65.1	57.9
	Av. 1926-30	5,265	8.0	16.3	28.6	22.3	19.4	61.3	52.0
	Av. 1931-35	5,530	7.4	28.5	47.3	20.6	18.6	50.9	34.0
	1934	6,053	8.0	31.8	51.7	21.5	19.3	46.7	29.0
British Columbia.....	1935	6,010	7.9	34.7	54.9	21.7	19.6	43.6	25.6
	1936	6,020	7.8	37.2	57.4	21.0	18.7	41.8	23.9
	Av. 1921-25	3,971	7.1	16.2	21.4	22.0	20.6	61.8	58.0
	Av. 1926-30	4,786	7.5	18.1	24.9	20.9	21.7	61.0	53.4
	Av. 1931-35	4,267	6.0	26.5	37.5	23.4	26.6	50.2	35.9
Canada ¹ (Exclusive of the Territories).....	1934	4,771	6.6	28.9	41.3	24.1	27.3	47.1	31.4
	1935	5,034	6.8	30.9	42.2	26.6	28.9	42.6	28.9
	1936	5,451	7.3	32.5	43.1	27.7	31.6	39.8	25.3
	Av. 1926-30	71,885	7.3	54.9	61.4	10.4	9.2	34.8	29.4
	Av. 1931-35	68,596	6.4	60.9	69.8	9.9	9.4	29.1	20.8
	1934	73,092	6.8	63.6	72.9	9.9	9.3	26.5	17.8
	1935	76,893	7.0	67.1	75.5	9.5	9.2	23.4	15.3
	1936	80,904	7.3	69.5	77.6	9.3	8.9	21.2	13.5

¹ Quebec was not included in the registration area prior to 1926.

Marriage Rates in Various Countries.—For comparative purposes, the crude marriage rates per 1,000 of population in various countries of the world and in the provinces of Canada are shown for the indicated years in Table 14.

14.—Crude Marriage Rates of Various Countries of the World and of Provinces of Canada in Recent Years.

Country.	Year.	Crude Marriage Rate per 1,000 Population.	Country or Province.	Year.	Crude Marriage Rate per 1,000 Population.
Country—			Country—concluded.		
Union of South Africa (whites)	1935	10.4	Northern Ireland.....	1935	6.9
Germany.....	1935	9.7	France.....	1935	6.8
Denmark.....	1935	9.3	Austria.....	1935	6.8
Roumania.....	1935	8.7	Greece.....	1935	6.7
England and Wales.....	1935	8.6	Italy.....	1935	6.7
Hungary.....	1935	8.5	Newfoundland.....	1935	6.4
Latvia.....	1935	8.4	Iceland.....	1935	6.2
Australia.....	1935	8.4	Spain.....	1934	6.0
Poland.....	1935	8.3	Uruguay.....	1935	5.6
British Isles.....	1935	8.2	Irish Free State.....	1935	4.8
Estonia.....	1935	8.2	Ceylon.....	1935	4.5
Sweden.....	1935	8.2	Jamaica.....	1935	4.1
New Zealand.....	1935	8.2	Salvador.....	1934	3.6
Japan.....	1935	8.0	Panama.....	1934	3.3
Bulgaria.....	1935	7.9			
United States.....	1932 ¹	7.9			
Scotland.....	1935	7.7	Province of Canada—		
Czechoslovakia.....	1935	7.6	Manitoba.....	1936	8.1
Belgium.....	1935	7.6	New Brunswick.....	1936	7.8
Finland.....	1935	7.6	Alberta.....	1936	7.8
Lithuania.....	1935	7.4	Nova Scotia.....	1936	7.7
Switzerland.....	1935	7.3	Ontario.....	1936	7.5
Canada	1936	7.3	British Columbia.....	1936	7.3
Chile.....	1935	7.3	Quebec.....	1936	7.0
Netherlands.....	1935	7.2	Saskatchewan.....	1936	6.6
Norway.....	1935	7.1	Prince Edward Island.....	1936	6.5

¹ In the United States 1932 is the latest year for which the rate has been computed.

Subsection 2.—Divorces.

For many years subsequent to Confederation the number of divorces granted in Canada was very small, 1883, with 13 divorces, being the first year in which the number attained two figures, while 1903, with 21 divorces, was the record year up to that time. Thereafter the numbers grew more rapidly, 1909 showing 51 divorces and 1913, the last pre-war year, 60 divorces. This number was, however, less than one per 1,000 of the marriages contracted in Canada in these years.

One effect of the War was to increase divorce. The causes may be found in the generally unsettling psychological influences of the war period, and the long separations between men on active service and their wives. The provision of new facilities for divorce is also to be considered; owing to a decision of the British Privy Council, divorces in the Prairie Provinces, have, subsequently to 1918, been granted by the courts of these provinces, so that Ontario and Quebec have since then been the only provinces in which the applicant for divorce must secure a special private Act of Parliament. In 1930, however, an Act of the Dominion Parliament (20-21 Geo. V. c. 14) gave jurisdiction in divorce cases to the Supreme Court of Ontario.

The above-mentioned causes tended to increase the number of divorces granted in Canada, which grew steadily from 114 in 1918 to 873 in 1930. The numbers

are those of final decrees, which alone really constitute divorces. In 1931 the number decreased to 692, this being largely due to the transfer of jurisdiction in Ontario divorces from the Parliament of Canada to the Supreme Court of the province, with the consequent delay between the granting of the decree *nisi* and the decree absolute. Since 1931 there has been an increase of 170 p.c. in the total number of divorces granted. All provinces except Nova Scotia show increases over that year. The statistics of divorces granted in the years 1918 to 1937, inclusive, will be found in Table 15. The figures in this table have been revised since the publication of the 1937 Year Book, as in some cases those of Dominion divorces for the earlier years included annulments, which are not included in the provincial figures. A redistribution as between provinces has also been made, the present figures being according to the domicile of the husband, whereas those previously published were arranged according to the residence of the petitioner.*

15.—Statistics of Divorces Granted in Canada, 1918-37.

NOTE.—In consequence of a decision of the British Privy Council, divorces in Manitoba, Saskatchewan, and Alberta have, subsequently to 1918, been granted by the courts of these provinces. The statistics shown here have been revised since the publication of the 1937 Year Book. For divorces in each year prior to 1918, see the 1921 Year Book, p. 825.

Year.	Granted by the Dominion Parliament.			Granted by the Courts.						Total for Canada.
	P. E. Island.	Quebec.	Ontario.	Nova Scotia.	New Brunswick.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	
1918.....	Nil	2	10	24	10	Nil	1 ¹	2 ¹	65	114
1919.....	Nil	4	46	36	13	88 ²	3	36 ²	147	373
1920.....	Nil	9	89	45	15	42	26	65	136	427
1921.....	Nil	10	96	41	13	122	50	84	128	544
1922.....	Nil	6	91	35	12	97	37	129	138	545
1923.....	Nil	10	102	22	19	81	41	87	139 ²	501
1924.....	Nil	13	113	42	15	77 ³	28	118	136 ²	542
1925.....	Nil	13	119	30	15	79	42	101	150	549
1926.....	Nil	10	111	19	12	85	48 ²	154	167	606
1927.....	Nil	13	181	29	17	101	60	148	197	746
1928.....	Nil	24	213	28	13	79	55	168	203	783
1929.....	Nil	30	207	30	21	89	69	147	222	815
1930.....	Nil	41	204	19	27	114	62	151	255	873
1931.....	1	38	90 ⁴	36	20	94	51	154	208	692
1932.....	Nil	27	338 ⁴	35	26	114	61	149	245	995
1933.....	Nil	24	303 ⁴	27	12	116	48	135	258	923
1934.....	Nil	38	356 ⁴	33	17	126	62	168	306	1,106
1935.....	2	28	460 ⁴	52	36	145	60	209	384	1,376
1936.....	Nil	40	507 ⁴	41	38	179	79	209	433	1,526
1937.....	2	43	596 ⁴	36	54	200	109	241	589	1,870

¹ Granted by Parliament.

² One granted by Parliament.

³ Two granted by Parliament.

⁴ Granted by the courts.

Section 3.—Deaths.

Within the past century, and more especially within the past generation, there has occurred throughout the countries of the white world a notable decline in the death rate, except where man has brought death upon himself through wars and the aftermath of wars. How far this decline has been due to advances in medical

* The General Statistics Branch of the Dominion Bureau of Statistics publishes a bulletin on Divorce showing the sex of applicants and the number of persons re-married, together with comparisons with certain other countries. Application for this bulletin should be made to the Dominion Statistician.

science, how far to better sanitation, and how far to the improvement in the general conditions of living, as a result of the increase in the productive power of humanity, is in dispute, but concerning the facts there is no doubt.

Perhaps the most impressive testimony regarding this decline in the death rate is furnished by the mortality statistics of Sweden, where vital statistics have been kept with great accuracy for the whole nation ever since 1750. There, the crude death rate declined from an average of 27.4 per 1,000 in the decade 1751-60 to 14.3 in the decade 1911-20 and to 11.7 in 1935.

Similarly, in England and Wales, the crude death rate, which was 22.5 per 1,000 in the 60's, 21.4 in the 70's and 18.2 in the 90's of the past century, declined to 15.4 in the first decade of the present century and 12.1 in the third; it was 11.7 in 1935. In Scotland, again, the average rate was 22.1 in the '60's, 21.8 in the '70's, 18.6 in the '90's, 13.9 in 1921-25, 13.6 in 1926-30, and 13.2 in 1935.

There will always be years of specially high mortality, for instance 1918, when the death rate in Ontario, the most populous of the provinces of Canada, was 15.3 per 1,000, owing to the influenza-pneumonia epidemic, as against 12.0 in 1917 and 11.9 in 1919. Over a period, however, these abnormalities are reduced to negligibility, and it remains generally true that from decade to decade there is a decline in the crude death rates of the countries of the white man's world.

As for Canada, while the period elapsed since the introduction of complete and comprehensive vital statistics in 1920 has been too short to establish a definite downward trend, the rate of 12.4 per 1,000 for that year, in the eight provinces then included in the registration area, was substantially higher than in any subsequent year. A decided improvement is shown in the deaths and death rate of Quebec for the years 1933-36. This has been in evidence ever since 1926, but latterly Quebec has shown a lower rate than any of the provinces farther east.

Subsection 1.—General Mortality.

Summary statistics of total deaths and crude death rates in recent years are given in Table 32, p. 191, for Canada, by provinces. The absolute number of deaths as well as the crude death rate was higher for 1935 and 1936. In fact total deaths were greater than they have been since 1930, but the death rate was increased very little over the 1933 level although the advantage gained in 1934 was lost. A rising trend in the western provinces, where rates in the early '30's were unusually low, largely accounted for the increase.

Age Distribution of Decedents.—The numbers of males and females dying in the nine provinces in 1935 and 1936 are given by single years of age up to 5 and by quinquennial age groups thereafter in Table 16, together with the percentage of deaths occurring in each group in each of these years.

The quartile and decile ages of decedents for the years 1926, 1934, and 1935 are given for each sex and for the two sexes combined in Table 17. The fifth decile and second quartile (or the median) both mark the middle points of the arrays, and the deciles, dividing each half into five groups, give a more detailed picture of the age distribution in each half than do the quartiles. It is shown very definitely that the average ages of decedents have been increasing steadily. The method of construction and interpretation of this table is given on p. 163 in connection with a similar one showing quartile and decile ages of married fathers and mothers.

16.—Numerical and Percentage Distribution of Deaths in Canada by Sex and Age Groups, 1935-36.

Age Group.	Numbers.				Percentages.			
	Males.		Females.		Males.		Females.	
	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.
Under 1 year.....	9,069	8,281	6,661	6,293	15.9	14.4	13.8	12.8
1 year.....	1,172	1,053	1,038	929	2.0	1.8	2.1	1.9
2 years.....	533	527	480	411	0.9	0.9	1.0	0.8
3 years.....	408	352	319	289	0.7	0.6	0.7	0.6
4 years.....	296	268	257	267	0.5	0.5	0.5	0.5
Totals, Under 5 years.....	11,478	10,486	8,755	8,189	20.1	18.2	18.1	16.6
5-9 years.....	1,011	1,021	831	930	1.8	1.8	1.7	1.9
10-14 years.....	876	796	724	675	1.5	1.4	1.5	1.4
15-19 years.....	1,127	1,108	949	1,019	2.0	1.9	2.0	2.1
20-24 years.....	1,289	1,347	1,335	1,427	2.3	2.3	2.8	2.9
25-29 years.....	1,266	1,304	1,368	1,352	2.2	2.3	2.8	2.7
30-34 years.....	1,283	1,257	1,269	1,364	2.2	2.2	2.6	2.8
35-39 years.....	1,430	1,425	1,506	1,496	2.5	2.5	3.1	3.0
40-44 years.....	1,775	1,748	1,550	1,582	3.1	3.0	3.2	3.2
45-49 years.....	2,327	2,350	1,813	1,806	4.1	4.1	3.7	3.7
50-54 years.....	3,041	3,104	2,152	2,304	5.3	5.4	4.5	4.7
55-59 years.....	3,536	3,761	2,563	2,637	6.2	6.5	5.3	5.3
60-64 years.....	4,182	4,377	2,986	3,139	7.3	7.6	6.2	6.4
65-69 years.....	4,747	4,997	3,788	3,898	8.3	8.7	7.8	7.9
70-74 years.....	5,539	5,697	4,559	4,758	9.7	9.9	9.4	9.6
75-79 years.....	5,368	5,648	4,772	5,034	9.4	9.8	9.9	10.2
80-89 years.....	6,027	6,367	6,186	6,445	10.5	11.0	12.8	13.1
90 years or over.....	875	892	1,247	1,261	1.5	1.5	2.6	2.6
Totals, Stated Ages.....	57,177	57,685	48,353	49,316	100.0	100.0	100.0	100.0
Ages not stated.....	29	43	8	6	—	—	—	—
Totals, All Ages.....	57,206	57,728	48,361	49,322	—	—	—	—

17.—Quartile and Decile Ages of Decedents, by Sex, 1926, 1934, and 1935.

Position in Array, by Age.	Both Sexes.			Males.			Females.		
	1926.	1934.	1935.	1926.	1934.	1935.	1926.	1934.	1935.
First quartiles..... years of age	1-83	20-06	21-19	1-34	17-03	19-27	2-85	21-96	23-11
Second quartiles..... "	45-50	57-52	58-09	45-16	57-09	57-53	45-89	58-09	58-87
Third quartiles..... "	70-70	73-79	74-14	70-05	73-02	73-27	71-51	74-70	75-11
First deciles..... months of age	0-88	2-64	2-93	0-60	2-16	2-39	1-43	3-37	3-87
Second deciles..... years of age	0-71	5-01	7-08	0-55	3-46	4-85	0-98	8-36	10-61
Third deciles..... "	6-95	30-21	31-26	4-30	29-43	30-40	12-15	30-85	32-14
Fourth deciles..... "	28-77	47-39	48-08	26-47	47-57	48-06	30-61	47-16	48-10
Fifth deciles..... "	45-50	57-52	58-09	45-16	57-09	57-53	45-89	58-09	58-87
Sixth deciles..... "	58-40	65-03	65-52	57-73	64-28	64-66	59-13	65-98	66-71
Seventh deciles..... "	67-15	71-05	71-53	66-44	70-24	70-58	68-00	72-15	72-64
Eighth deciles..... "	74-05	76-25	76-56	73-28	75-46	75-71	74-00	77-21	77-56
Ninth deciles..... "	80-82	82-07	82-27	79-89	81-10	81-26	81-85	83-02	83-25

Standardized Death Rates.—While the crude death rate gives the actual mortality per 1,000 of population, the differing age constitution of the population in different communities and the high mortality among infants and elderly people make the crude death rate no true test of the relative expectation of life in such communities. Where the age constitution of a particular group is particularly favourable to low mortality, for example among the selected lives of soldiers in peace time, the crude rate will naturally be lower than elsewhere.

When comparisons of the rates of mortality in several communities are made by age groups the effects of differences in age constitution between these communities are eliminated, but by a process which does not bring together and express completely as a single figure the facts of the situation. It has therefore been considered

desirable to adopt a particular community as a standard, and to find what the death rates of other communities would have been if the age and sex constitution of their population had corresponded to those of the community taken as a standard. The "standard" population chosen for this purpose in England and Wales and the United States is the "standard million", based on the age and sex distribution per million of the population of England and Wales at the Census of 1901. That age and sex distribution was as follows:—

Age Group.	Both Sexes.	Males.	Females.
All ages.....	1,000,000	483,543	516,457
Under 5 years.....	114,262	57,039	57,223
5-9 years.....	107,209	53,462	53,747
10-14 years.....	102,735	51,370	51,365
15-19 years.....	99,796	49,420	50,376
20-24 years.....	95,946	45,273	50,673
25-34 years.....	161,579	76,425	85,154
35-44 years.....	122,849	59,394	63,455
45-54 years.....	89,222	42,924	46,298
55-64 years.....	59,741	27,913	31,828
65-74 years.....	33,080	14,691	18,389
75 years or over.....	13,581	5,632	7,949

Regarding the standard million of England and Wales the Registrar General says: "As the population of this country in 1901 included relatively few infants and old people it forms a standard exceptionally favourable to low mortality". The relative fewness of old people in the population is presumably due to the great improvement in mortality during the 19th century; the relative fewness of infants, to the marked reduction of the birth rate between the 1870's and the end of the century.

The process above described has been applied to the population of the eight provinces, the former registration area of Canada, for the years 1921-36 and to the population of Quebec for the years 1926-36 in Table 18. Of the rates there given, those for 1921 and 1922 have been calculated directly, the proportion of the population in each sex and age group according to the Census of 1921 being assumed to hold true for 1922 also; similarly the rates for 1930, 1931, and 1932 have been calculated directly from the proportions shown in each sex and age group at the Census of 1931. For the intervening years, 1923-29, for which estimates of total population but not of population by age groups were available, the following method was adopted. The proportions which the standardized rates of 1921 and 1922 (correct to three decimal places) bore to the crude were averaged, similarly those of 1930 and 1931, and the change was assumed to have taken place in an arithmetical progression during the intervening seven years. Quebec not having been in the registration area in the year 1921, a standardized rate was not available for that year or for 1922, but as the proportion of the standardized rate to the crude depends primarily on the sex and age distribution of the population, and as this distribution was known for 1921 and 1931, and the actual proportion of standardized rate to crude rate for 1931, it was possible to compute a theoretical proportion for 1921. The same method was followed for the total of the nine provinces. The rates for 1933-36 have been computed on the assumption that the arithmetical progression, to which reference has been made, continued over those years in all provinces with the exception of the Prairie Provinces, for which the data of the 1936 Census were used.

In all of the eight provinces for which 1921 figures are given the proportion of the standardized rate to the crude was higher in 1921 than in 1931; in other words, the age distribution had become more unfavourable in the later year. In the Maritime Provinces, Quebec, and Ontario the process of "standardizing" the death rate results in a reduced rate. This is particularly true of Prince Edward Island, which has the largest proportion of aged persons of all Canadian provinces. In the western provinces, on the other hand, the standardized rates are higher than the crude.

18.—Crude and Standardized Death Rates in Canada, by Provinces, 1929-36, with Averages, 1921-25, 1926-30, and 1931-35.

Province.	Averages.			1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	1921-25.	1926-30.	1931-35.								
P.E. Island—											
Crude.....	12.5	11.0	11.3	12.8	10.9	10.4	11.8	11.6	11.6	11.0	11.1
Standardized....	9.3	8.1	7.9	9.2	7.9	7.4	8.2	8.1	8.1	7.6	7.6
Nova Scotia—											
Crude.....	12.6	12.4	11.7	12.9	12.0	11.6	11.9	11.6	11.5	11.7	11.0
Standardized....	10.4	10.0	9.1	10.4	9.7	9.3	9.2	9.0	8.9	9.0	8.4
New Brunswick—											
Crude.....	13.1	12.5	11.2	12.9	12.3	11.4	11.0	11.7	11.0	11.1	11.0
Standardized....	11.5	10.9	9.6	11.2	10.7	9.8	9.4	9.9	9.3	9.4	9.3
Quebec—											
Crude.....	¹	13.5	11.1	13.4	12.7	12.0	11.4	10.7	10.6	10.7	10.3
Standardized....	¹	13.1	10.8	13.1	12.4	11.7	11.1	10.4	10.3	10.4	10.1
Ontario—											
Crude.....	11.3	11.2	10.1	11.4	11.0	10.4	10.5	9.9	9.7	9.9	10.2
Standardized....	10.3	9.8	8.5	9.9	9.5	8.9	8.8	8.5	8.3	8.1	8.3
Manitoba—											
Crude.....	8.6	8.3	7.6	8.6	8.3	7.6	7.5	7.7	7.3	8.1	8.7
Standardized....	9.4	8.8	7.6	9.0	8.6	7.9	7.8	7.6	7.0	7.8	8.4
Saskatchewan—											
Crude.....	7.5	7.3	6.5	7.6	7.0	6.6	6.5	6.5	6.4	6.6	6.8
Standardized....	8.5	8.2	7.1	8.6	7.8	7.5	7.4	7.0	6.7	6.9	7.1
Alberta—											
Crude.....	8.3	8.4	7.3	9.1	7.8	7.2	7.5	7.1	7.1	7.5	8.0
Standardized....	9.5	9.4	7.8	10.2	8.5	8.0	8.4	7.6	7.3	7.7	8.2
British Columbia—											
Crude.....	8.7	9.3	8.9	9.7	9.5	8.8	8.7	8.7	8.8	9.3	9.6
Standardized....	9.0	8.9	8.0	9.1	8.7	8.1	8.0	7.8	7.8	8.1	8.2
Canada (Exclusive of the Territories)—											
Crude.....	¹	11.1	9.7	11.3	10.7	10.1	9.9	9.6	9.4	9.7	9.7
Standardized....	¹	10.5	9.1	10.7	10.1	9.5	9.3	8.9	8.7	9.0	9.0
Canada (Former Reg. Area)—											
Crude.....	10.3	10.2	9.2	10.5	10.0	9.4	9.4	9.1	8.9	9.3	9.5
Standardized....	9.9	9.5	8.3	9.8	9.2	8.6	8.5	8.2	8.0	8.2	8.4

¹ Quebec was not included in the registration area prior to 1926.

Causes of Death.—Nearly 87 p.c. of deaths recorded in Canada in the years 1932 to 1936 were due to the 32 specific causes named in Tables 19 and 20. In these tables the groupings are in accordance with the revision of the International List in 1929, which was first applied to Canadian mortality statistics for the year 1931. In the chart which accompanies the tables, the main object has been to attain the greatest degree of comparability possible over the whole period 1926-36. For this purpose it has been necessary to depart somewhat from the grouping of Tables 19 and 20.

In any analysis of the relative importance of the causes of death it must be remembered that the Canadian population is an ageing one—that is, the average age is being advanced year by year due to the long-term influences of a falling birth rate, falling specific death rates, and very limited immigration. Since 1913 immigration has been very much curtailed and its effect on age distribution of population is illustrated by the movement of what may be termed the “immigration hump” (that increment of population due to extensive immigration before 1913). This is gradually passing up the age scale. Further, due to the improvements in sanitation and health conditions generally, the average age at which death takes place has been pushed gradually higher. All these factors tend to thrust those causes which are commonly associated with advancing years to the fore.

Some of the effects of the ageing of the population can be observed by the comparison of crude and standardized mortality rates for individual causes of death in 1921 and 1931, since standardized rates are calculated in order to eliminate the effects of changes in sex and age composition of the population. Cancer provides a pronounced example of the ageing effect. The crude rate for cancer was 75.3 in 1921 and in 1931 it was 95.8. The increase was thus 27 p.c. The standardized rate, however, was 72.7 in 1921 and 81.4 in 1931, an increase of only 12 p.c. It may be stated, therefore, that roughly more than half of the increase in the crude cancer death rate between 1921 and 1931 was accounted for by the ageing of the population. Nevertheless, cancer shows a persistent increase over the years in spite of all efforts to control its spread. Diseases of the heart and arteries are two other important causes which affect people of advancing years and which have shown substantial increases. In the case of diseases of the heart, the crude rate showed an increase of 25.5 p.c. between 1921 and 1931, but, again, the standardized rate increased by only 9 p.c. The crude rate for diseases of the arteries advanced by no less than 71 p.c. and the standardized by 50 p.c. over the decade. For nephritis, a disease which falls in the same general class, the increase in the crude rate was 28.5 p.c. and in the standardized, 12.5 p.c. Pneumonia is particularly fatal among those of advanced years and among infants; the same influences as have been mentioned have, no doubt, affected the figures for this disease.

19.—Deaths in Canada, by Principal Causes, 1932-36.

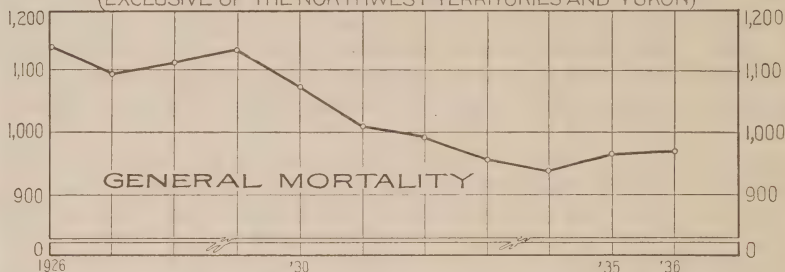
Int. List No. ¹	Cause of Death.	1932.	1933.	1934.	1935.	1936.
1, 2	Typhoid fever.....	339	291	293	273	256
7	Measles.....	330	170	183	490	376
8	Scarlet fever.....	197	157	226	242	244
9	Whooping-cough.....	555	552	875	892	594
10	Diphtheria.....	398	239	232	264	258
11	Influenza.....	4,236	4,019	2,004	3,392	3,113
16	Poliomyelitis and polioencephalitis (acute).....	164	73	84	64	97
17	Lethargic or epidemic encephalitis.....	76	58	47	54	52
18	Epidemic cerebrospinal meningitis.....	139	109	84	112	103
23	Tuberculosis, respiratory system.....	5,870	5,664	5,290	5,466	5,528
24-32	Tuberculosis, other organs.....	1,296	1,275	1,141	1,131	1,235
45-53	Cancer.....	10,024	10,653	10,581	11,156	11,694
59	Diabetes mellitus.....	1,343	1,287	1,321	1,459	1,442
71	Anæmia.....	728	736	612	650	646
82 a, b, c	Cerebral hæmorrhage, embolism or thrombosis.....	2,543	2,639	2,577	2,105	1,890
82d	Paralysis without specified cause.....	654	559	547	415	358
86	Convulsions (under 5 years of age).....	304	263	261	234	200
90-95	Diseases of the heart.....	15,328	15,485	16,352	16,069	16,424
96, 97, 99, 102	Diseases of the arteries.....	6,798	6,950	7,379	8,302	9,112
106	Bronchitis.....	437	367	380	363	342
107-109	Pneumonia.....	7,045	6,487	6,530	7,411	7,313
119, 120	Diarrhœa and enteritis.....	3,735	3,395	3,730	2,767	2,378
121	Appendicitis.....	1,454	1,455	1,578	1,491	1,428
122	Hernia, intestinal obstruction.....	947	1,029	1,074	1,121	1,050
130-132	Nephritis.....	5,635	5,516	5,643	6,176	6,402
137	Diseases of the prostate.....	879	928	944	1,089	1,157
140-150	Puerperal causes.....	1,181	1,111	1,167	1,093	1,233
157	Congenital malformations.....	1,349	1,374	1,361	1,423	1,439
158-161	Diseases of early infancy.....	7,932	7,337	6,936	6,880	6,605
162	Senility (old age).....	2,192	2,037	1,882	1,932	1,691
163-171	Suicides.....	1,024	922	927	905	928
173-198	Violent deaths (suicides excepted).....	5,621	5,294	5,542	5,993	6,535
	Other specified causes.....	12,617	12,546	12,857	13,391	14,216
	Totals, Specified Causes.....	103,370	100,975	100,645	104,805	106,339
199, 200	Ill-defined diseases.....	1,007	993	937	762	711
	Totals.....	104,377	101,968	101,582	105,567	107,050

¹ The numbers given in this column refer to the International List of Causes of Death, as revised in 1929 by the International Commission on the Classification of Diseases and Causes of Death. This classification, in its detailed, intermediate, or abridged form, is accepted in almost all civilized countries.

DEATH RATES PER 100,000 POPULATION IN CANADA

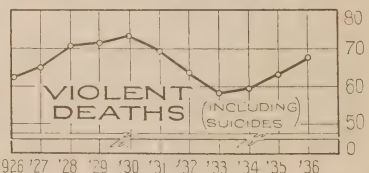
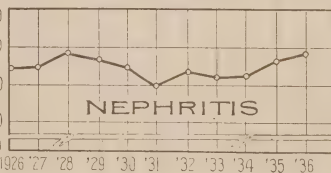
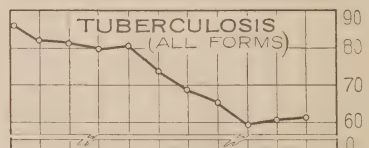
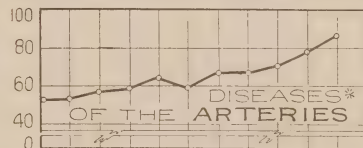
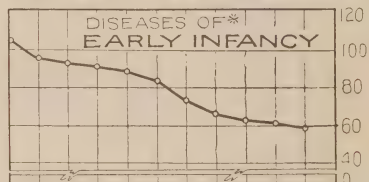
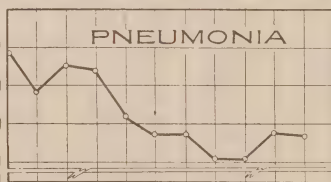
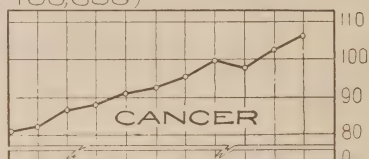
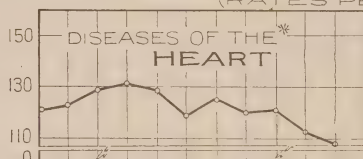
1926-1936

(EXCLUSIVE OF THE NORTHWEST TERRITORIES AND YUKON)



EIGHT IMPORTANT CAUSES OF DEATH

(RATES PER 100,000)



*The rubrics (of the International List) included in the indicated groups have been selected to preserve the greatest degree of continuity possible. For this purpose it has been necessary to depart in these cases (indicated by the asterisks) from the groupings in Tables 19 and 20. In all other cases the classification is the same as shown in the tables.

20.—Death Rates per 100,000 Population in Canada, by Principal Causes, 1932-36.

Int. List No. ¹	Cause of Death.	1932.	1933.	1934.	1935.	1936.
1, 2	Typhoid fever.....	3.2	2.7	2.7	2.5	2.3
7	Measles.....	3.1	1.6	1.7	4.5	3.4
8	Scarlet fever.....	1.9	1.5	2.1	2.2	2.2
9	Whooping-cough.....	5.3	5.2	8.1	8.2	5.4
10	Diphtheria.....	3.8	2.2	2.1	2.4	2.3
11	Influenza.....	40.4	37.7	18.5	31.1	28.3
16	Poliomyelitis and polioencephalitis (acute).....	1.6	0.7	0.8	0.6	0.9
17	Lethargic or epidemic encephalitis.....	0.7	0.5	0.4	0.5	0.5
18	Epidemic cerebrospinal meningitis.....	1.3	1.0	0.8	1.0	0.9
23	Tuberculosis, respiratory system.....	55.9	53.1	48.9	50.1	50.2
24-32	Tuberculosis, other organs.....	12.4	12.0	10.6	10.4	11.2
45-53	Cancer.....	95.5	99.9	97.9	102.2	106.2
59	Diabetes mellitus.....	12.8	12.1	12.2	13.4	13.1
71	Anæmia.....	6.9	6.9	5.7	6.0	5.9
82 a, b, c	Cerebral hæmorrhage, embolism or thrombosis.....	24.2	24.7	23.8	19.3	17.2
82d	Paralysis without specified cause.....	6.2	5.2	5.1	3.8	3.3
86	Convulsions (under 5 years of age).....	2.9	2.5	2.4	2.1	1.8
90-95	Diseases of the heart.....	146.1	145.2	151.3	147.1	149.1
96, 97	Diseases of the arteries.....	64.8	65.2	68.3	76.0	82.7
99, 102						
106	Bronchitis.....	4.2	3.4	3.5	3.3	3.1
107-109	Pneumonia.....	67.1	60.8	60.4	67.9	66.4
119, 120	Diarrhœa and enteritis.....	35.6	31.8	34.5	25.3	21.6
121	Appendicitis.....	13.9	13.6	14.6	13.7	13.0
122	Hernia, intestinal obstruction.....	9.0	9.6	9.9	10.3	9.5
130-132	Nephritis.....	53.7	51.7	52.2	56.6	58.1
137	Diseases of the prostate.....	8.4	8.7	8.7	10.0	10.5
140-150	Puerperal causes.....	11.3	10.4	10.8	10.0	11.2
157	Congenital malformations.....	12.9	12.9	12.6	13.0	13.1
158-161	Diseases of early infancy.....	75.6	68.8	64.2	63.0	60.0
162	Senility (old age).....	20.9	19.1	17.4	17.7	15.4
163-171	Suicides.....	9.8	8.6	8.6	8.3	8.4
173-198	Violent deaths (suicides excepted).....	53.6	49.6	51.3	54.9	59.3
	Other specified causes.....	120.3	117.6	118.9	122.6	129.1
	Totals, Specified Causes.....	985.2	946.6	931.0	959.7	965.5
199, 200	Ill-defined diseases.....	9.6	9.3	8.7	7.0	6.5
	Totals, Death Rates per 100,000 Population.....	994.8	955.9	939.7	966.6	971.9

For footnote, see end of Table 19.

Deaths in Canadian Cities.—Table 21 gives the numbers of deaths in Canadian cities and towns of 10,000 population and over for the years 1932-36, together with averages, 1926-30 and 1931-35. Deaths in Canada as a whole declined steadily for the period 1931-34, but for 1935 and 1936 there were substantial increases. The figure for the latter year was 107,050, or almost 1,000 more than for 1931. The total deaths of the 67 cities listed in Table 21 show a slightly increased proportion to population for the five-year period 1931-35 as compared with 1926-30. For 1932, which marked the depth of the economic depression, the deaths in these cities increased, thus going against the general trend for Canada; for other years, however, the general trend was followed.

21.—Deaths in Cities and Towns of 10,000 Population and Over, 1932-36, with Averages, 1926-30 and 1931-35.

Province and City or Town.	Census Population, 1931.	Averages.		1932.	1933.	1934.	1935.	1936.
		1926-30.	1931-35.					
P. E. Island—								
Charlottetown.....	12,361	264	262	285	252	268	248	277
Nova Scotia—								
Glace Bay.....	20,706	294	258	267	235	256	269	273
Halifax.....	59,275	884	898	931	883	927	874	871
Sydney.....	23,089	241	213	204	213	228	233	177

21.—Deaths in Cities and Towns of 10,000 Population and Over, 1932-36, with Averages, 1926-30 and 1931-35—concluded.

Province and City or Town.	Census Popu- lation, 1931.	Averages.		1932.	1933.	1934.	1935.	1936.
		1926-30.	1931-35.					
New Brunswick—								
Moncton.....	20,689	252	245	259	266	240	247	227
Saint John.....	47,514	712	667	707	726	626	586	648
Quebec—								
Cnicoutimi.....	11,877	228	224	200	247	248	240	261
Granby.....	10,587	115	115	124	76	110	121	131
Hull.....	29,433	354	360	362	343	335	363	305
Joliette.....	10,765	173	172	156	175	170	166	163
Lachine.....	18,630	214	186	177	179	182	193	182
Lévis.....	11,724	223	219	228	204	201	209	187
Montreal.....	818,577	11,260	9,808	10,410	9,239	9,261	9,577	9,389
Outremont.....	28,641	105	161	152	166	179	178	167
Quebec.....	130,594	2,269	1,991	2,041	2,043	1,874	1,862	1,907
St. Hyacinthe.....	13,448	288	293	327	294	255	292	308
St. Jean.....	11,256	120	125	137	111	112	139	161
Shawinigan Falls.....	15,345	199	157	148	159	141	158	156
Sherbrooke.....	28,933	450	443	438	416	429	483	445
Sorel.....	10,320	167	141	130	129	127	161	129
Thetford Mines.....	10,701	157	139	133	146	132	157	149
Three Rivers.....	35,450	556	610	528	598	676	616	655
Velleyfield.....	11,411	180	154	174	147	152	145	173
Verdun.....	60,745	398	460	459	409	463	518	453
Westmount.....	24,235	143	249	278	231	279	243	268
Ontario—								
Belleville.....	13,790	230	227	244	208	209	245	259
Brantford.....	30,107	382	362	352	376	350	354	403
Chatham.....	14,569	300	303	311	288	265	336	325
Cornwall.....	11,126	238	234	250	209	240	239	260
Fort William.....	26,277	215	203	201	198	186	216	219
Galt.....	14,006	172	187	191	201	196	197	169
Guelph.....	21,075	235	234	233	236	242	226	204
Hamilton.....	155,547	1,473	1,491	1,510	1,406	1,462	1,547	1,639
Kingston.....	23,439	476	476	501	445	452	532	488
Kitchener.....	30,793	303	347	385	354	310	366	384
London.....	71,148	1,089	1,020	1,066	1,019	1,005	1,049	1,104
Niagara Falls.....	19,046	215	200	192	206	202	187	202
North Bay.....	15,528	149	155	151	138	176	172	171
Oshawa.....	23,439	216	186	184	167	195	176	222
Ottawa.....	126,872	1,664	1,715	1,727	1,701	1,618	1,822	1,787
Owen Sound.....	12,839	163	181	197	179	164	187	183
Peterborough.....	22,327	308	324	329	290	353	323	374
Port Arthur.....	19,818	224	197	205	187	189	189	218
St. Catharines.....	24,753	317	283	288	281	271	301	311
St. Thomas.....	15,430	226	227	233	225	224	251	266
Sarnia.....	18,191	222	224	243	235	220	201	261
Sault Ste. Marie.....	23,082	218	214	217	187	214	229	238
Stratford.....	17,742	200	199	190	198	191	221	200
Sudbury.....	18,518	215	235	242	212	229	241	327
Timmins.....	14,200	146	171	157	163	170	182	190
Toronto.....	631,207	6,735	6,546	6,627	6,485	6,266	6,605	7,044
Welland.....	10,709	162	138	129	121	152	135	146
Windsor ¹	98,179	965	838	822	795	862	853	882
Woodstock.....	11,395	173	177	173	181	195	178	193
Manitoba—								
Brandon.....	16,461 ²	244	225	227	216	209	234	239
St. Boniface.....	16,275 ²	482	417	425	395	368	473	499
Winnipeg.....	215,814 ²	1,757	1,712	1,705	1,656	1,663	1,832	2,018
Saskatchewan—								
Moose Jaw.....	19,805 ²	226	196	194	217	186	173	212
Prince Albert.....	11,049 ²	153	175	173	170	171	187	207
Regina.....	53,354 ²	481	468	469	457	448	511	535
Saskatoon.....	41,734 ²	485	450	467	429	453	467	484
Alberta—								
Calgary.....	83,407 ²	756	730	748	708	723	774	887
Edmonton.....	85,774 ²	862	884	921	870	883	948	1,100
Lethbridge.....	13,523 ²	185	193	197	198	212	192	189
British Columbia—								
New Westminster.....	17,524	273	287	278	286	277	304	355
Vancouver.....	246,593	2,175	2,303	2,301	2,239	2,211	2,466	2,707
Victoria.....	39,082	552	561	541	543	589	608	678

¹ Includes East Windsor, Sandwich, and Walkerville.² Census of 1936.

Comparative Crude Death Rates of Different Countries.—In Table 22 will be found a comparative statement of the crude death rates of various countries for the latest available year. Those of the provinces of Canada are also given for comparison. The Netherlands, New Zealand, Australia, and Canada, are the only countries with death rates under 10·0 per 1,000 of population. The low death rates in the Prairie Provinces are in all three cases due in part to a favourable age distribution of population.

22.—Crude Death Rates of Various Countries and of the Provinces of Canada in Recent Years.

Country.	Year.	Crude Death Rate.	Country or Province.	Year.	Crude Death Rate.
Country—			Country—concluded.		
New Zealand.....	1935	8·2	Bulgaria.....	1935	14·5
Netherlands.....	1935	8·7	Estonia.....	1935	14·9
Australia.....	1935	9·5	Greece.....	1935	14·9
Canada.....	1936	9·7	Hungary.....	1935	15·3
Norway.....	1935	10·3	Spain.....	1935	15·3
Union of South Africa (whites).....	1935	10·5	France.....	1935	15·7
Uruguay.....	1935	10·6	Japan.....	1935	16·8
United States (reg. area).....	1935	10·9	Jamaica.....	1935	17·7
Denmark.....	1935	11·1	Palestine.....	1935	18·6
Sweden.....	1935	11·7	Roumania.....	1935	21·1
England and Wales.....	1935	11·7	Costa Rica.....	1935	21·8
Germany.....	1935	11·8	British India.....	1935	23·6
Panama.....	1934	11·9	Salvador.....	1934	24·3
Finland.....	1935	12·0	Chile.....	1935	25·0
British Isles.....	1935	12·1	Straits Settlements.....	1935	25·1
Switzerland.....	1935	12·1	Egypt.....	1935	26·7
Iceland.....	1935	12·2	Ceylon.....	1935	36·6
Belgium.....	1935	12·9			
Scotland.....	1935	13·2	Province of Canada—		
Newfoundland.....	1935	13·4	Saskatchewan.....	1936	6·8
Czechoslovakia.....	1935	13·5	Alberta.....	1936	8·0
Austria.....	1935	13·6	Manitoba.....	1936	8·7
Italy.....	1935	13·9	British Columbia.....	1936	9·6
Irish Free State.....	1935	14·0	Ontario.....	1936	10·2
Lithuania.....	1935	14·0	Quebec.....	1936	10·3
Poland.....	1935	14·0	New Brunswick.....	1936	11·0
Latvia.....	1935	14·2	Nova Scotia.....	1936	11·0
Northern Ireland.....	1935	14·4	Prince Edward Island.....	1936	11·1

Subsection 2.—Infantile and Maternal Mortality.

In recent years a great part of the energy devoted by the medical profession and sanitarians to effect a decline in the death rate has gone to reduce infantile mortality, and in this field a large measure of success has been attained. In Canada, the Dominion, provincial, and municipal health authorities have all taken part in the struggle to reduce infantile mortality, and usually, in the absence of epidemics, each year is showing an improvement. In the sixteen years for which the figures are available there is evident a very considerable decline in infantile mortality. In 1921 the infant death rate for Canada (using figures from provincial sources for Quebec) was 102 per 1,000 live births. This rate had been reduced to 66 in 1936. Table 23 gives figures for the whole of Canada for the years 1931 to 1936 and averages for the five-year periods 1921-25, 1926-30, and 1931-35. The infantile mortality in Quebec still exceeds that in any other province, although a study of the rates shows that steady improvement has been made in the ten-year period during which the province has been included in the registration area. In Canada as a whole over 9,000 infant lives were preserved in 1936 which, under conditions prevailing in 1926, would probably have been lost.

23.—Infantile Mortality, by Provinces, together with the Rates per 1,000 Live Births, 1931-36, with Averages for 1921-25, 1926-30, and 1931-35.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada. ¹
A.—INFANT DEATHS.										
Averages, 1921-25.....	151	1,139	1,165	2	5,916	1,394	1,789	1,327	621	2
Averages, 1926-30.....	122	934	1,039	10,518	5,091	1,031	1,559	1,195	571	22,060
Averages, 1931-35.....	131	840	857	7,756	3,962	835	1,261	998	464	17,104
1931.....	128	914	944	9,443	4,833	924	1,463	1,197	514	20,360
1932.....	132	849	774	7,744	4,133	836	1,321	997	477	17,263
1933.....	118	791	821	7,270	3,804	844	1,231	966	439	16,284
1934.....	130	807	878	7,388	3,523	734	1,093	891	426	15,870
1935.....	145	838	866	6,939	3,515	837	1,194	936	460	15,730
1936.....	137	781	806	6,220	3,416	779	1,030	940	465	14,574

B.—INFANT DEATH RATES PER 1,000 LIVE BIRTHS.

Averages, 1921-25.....	77	94	105	2	83	84	83	86	61	2
Averages, 1926-30.....	71	85	101	127	74	72	73	75	55	93
Averages, 1931-35.....	67	73	82	98	61	61	62	60	46	75
1931.....	68	79	87	113	70	64	69	69	49	85
1932.....	65	73	72	94	62	59	63	59	47	73
1933.....	61	71	82	95	60	63	61	60	46	73
1934.....	67	71	86	97	57	55	55	55	43	72
1935.....	72	72	83	92	56	63	61	58	46	71
1936.....	69	66	77	83	55	61	54	60	44	66

¹ Exclusive of the Territories.

² Quebec was not included in the registration area prior to 1926.

Infantile Mortality by Causes of Death.—Twenty-one principal causes of death accounted in the years 1926 to 1936 for between 91 and 92 p.c. of the infantile mortality experienced in the Dominion, as is shown in Table 24. It is noteworthy that four causes present at birth, *viz.*, premature birth, injury at birth, congenital debility and congenital malformations, accounted for over 46 p.c. of the infant deaths of 1936. This percentage shows a definite increase in the years covered. In 1926 it was 41.4 and in 1930 42.3, and since the decline in rate of infant deaths has decreased by nearly 39 p.c. in the interval since 1926, great improvement in the post-natal care of infants is indicated. In the years 1935 and 1936, 49.2 p.c. and 50.7 p.c., respectively, of all infants who died were less than one month old, and 35.3 p.c., and 37.2 p.c., respectively, were less than one week old, as is shown in Table 25.

24.—Infantile Mortality in Canada by Principal Causes of Death, 1926, 1935-36.

NOTE.—Figures for the former registration area for the single years 1921 to 1924 will be found at pp. 182-183 of the 1927-28 Year Book, and for 1925 to 1927 at pp. 177-178 of the 1929 Year Book. Figures for the whole of Canada for the years 1927 and 1928 will be found at pp. 138-140 of the 1932 Year Book, for 1929 and 1930 at pp. 177-178 of the 1933 Year Book, for 1931, 1932, and 1933 at pp. 202-203 of the 1934-35 Year Book, and for 1934 at pp. 176-177 of the 1935 Year Book.

Inter-national List No.	Cause of Death.	Year.	Numbers.			Rates per 100,000 Live Births.			Percent-age Distribution by Cause of Death.
			Males.	Fe-males.	Both.	Males.	Fe-males.	Both.	
7	Measles.....	1926	141	122	263	113	108	113	1.1
		1935	104	77	181	92	71	82	1.2
		1936	66	49	115	53	46	52	0.8
8	Scarlet Fever.....	1926	13	12	25	11	11	11	0.1
		1935	8	7	15	7	6	7	0.1
		1936	7	4	11	6	4	5	0.1
9	Whooping-cough.....	1926	358	415	773	299	368	332	3.3
		1935	318	281	599	281	260	270	3.8
		1936	203	189	392	179	177	178	2.7

24.—Infantile Mortality in Canada by Principal Causes of Death, 1926, 1935-36
—concluded.

Inter- national List No.	Cause of Death.	Year.	Numbers.			Rates per 100,000 Live Births.			Percent- age Distribu- tion by Cause of Death.
			Males.	Fe- males.	Both.	Males.	Fe- males.	Both.	
10	Diphtheria.....	1926	24	23	47	20	20	20	0.2
		1935	4	7	11	4	6	5	0.1
		1936	8	3	11	7	3	5	0.1
11	Influenza ¹	1926	576	374	950	481	331	408	4.0
		1935	412	264	676	364	244	305	4.3
		1936	344	232	576	304	217	261	4.0
15	Erysipelas.....	1926	51	50	101	43	44	43	0.4
		1935	21	32	53	19	30	24	0.3
		1936	42	27	69	37	25	31	0.5
16	Poliomyelitis and polio- encephalitis (acute)...	1926	6	3	9	5	3	4	0.3
		1935	5	2	7	4	2	3	0.2
		1936	1	3	4	1	3	2	0.1
18	Epidemic cerebro- spinal meningitis.....	1926	33	24	57	28	21	24	0.2
		1935	13	12	25	11	11	11	0.2
		1936	11	4	15	10	4	7	0.1
23-32	Tuberculosis ¹	1926	131	102	233	109	90	100	1.0
		1935	79	68	147	70	63	66	0.9
		1936	93	65	158	82	61	72	1.1
34	Syphilis.....	1926	68	60	128	57	53	55	0.5
		1935	98	84	182	87	78	82	1.2
		1936	118	89	207	104	83	94	1.4
86	Convulsions.....	1926	263	177	440	219	157	189	1.9
		1935	104	80	184	92	74	83	1.2
		1936	107	55	162	94	51	74	1.1
106	Bronchitis.....	1926	90	60	150	75	53	64	0.6
		1935	51	32	83	45	30	37	0.5
		1936	39	37	76	34	35	34	0.5
107-109	Pneumonia.....	1926	1,410	1,077	2,487	1,176	954	1,069	10.5
		1935	1,057	826	1,883	933	764	850	12.0
		1936	967	783	1,750	854	731	794	12.0
116-118	Diseases of the stomach	1926	156	126	282	130	112	121	1.2
		1935	62	44	106	55	41	48	0.7
		1936	70	40	110	62	37	50	0.8
119	Diarrhoea and en- teritis ¹	1926	2,451	1,867	4,318	2,045	1,654	1,855	18.2
		1935	1,143	835	1,978	1,009	772	893	12.6
		1936	932	702	1,634	823	656	741	11.2
122	Hernia, intestinal ob- struction.....	1926	68	39	107	57	35	46	0.5
		1935	62	18	80	55	17	36	0.5
		1936	41	32	73	36	30	33	0.5
157	Congenital malforma- tions.....	1926	777	635	1,412	648	563	607	6.0
		1935	682	581	1,263	602	537	570	8.0
		1936	690	569	1,259	609	531	571	8.6
158	Congenital debility....	1926	1,353	1,000	2,353	1,129	886	1,011	9.9
		1935	701	491	1,192	619	454	538	7.6
		1936	686	479	1,165	606	447	529	8.0
159	Premature birth.....	1926	2,936	2,147	5,083	2,449	1,902	2,184	21.5
		1935	2,036	1,492	3,528	1,797	1,379	1,593	22.4
		1936	1,951	1,515	3,466	1,722	1,415	1,573	23.8
160	Injury at birth.....	1926	563	386	949	470	342	408	4.0
		1935	587	349	936	518	323	423	6.0
		1936	529	332	861	467	310	391	5.9
161	Other diseases peculiar to early infancy ¹	1926	885	622	1,507	738	551	647	6.4
		1935	705	519	1,224	622	480	553	7.8
		1936	613	500	1,113	541	467	505	7.6
	Other specified causes ¹ .	1926	1,081	779	1,860	902	690	799	7.9
		1935	725	487	1,212	640	450	547	7.7
		1936	664	502	1,166	586	469	529	8.0
199, 200	Ill-defined causes.....	1926	103	55	158	86	49	68	0.7
		1935	92	73	165	81	67	75	1.0
		1936	99	82	181	87	77	82	1.2
	All causes.....	1926	13,537	10,155	23,692	11,294	8,996	10,179	100.0
		1935	9,069	6,661	15,730	8,005	6,159	7,103	100.0
		1936	8,281	6,293	14,574	7,310	5,877	6,613	100.0

¹ For these causes the comparability between the figures for the year 1926 and those for the years 1934-35 is not exact, owing to changes in classification.

² Less than one-tenth of one per cent.

25.—Proportion per 1,000 Deaths of Infants Under One Year of Age Occurring at each Age Period, 1935-36.

Age at Death.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada, ¹
1935.										
Under 1 month.....	497	494	438	427	604	501	513	549	539	492
Under 1 day.....	131	165	149	122	249	204	179	215	220	171
1 day and under 1 week.....	221	205	180	157	226	177	164	191	226	182
1 week and under 2 weeks.....	69	61	50	66	55	41	70	53	35	60
2 weeks and under 3 weeks.....	41	27	29	41	40	38	56	41	28	40
3 weeks and under 1 month.....	34	36	30	41	34	41	44	49	30	39
1 month and under 2 months.....	103	113	110	115	79	96	107	82	63	102
2 months and under 3 months.....	110	93	85	94	60	67	80	85	72	82
3 months and under 4 months.....	55	82	64	67	49	61	64	57	59	62
4 months and under 5 months.....	41	50	51	51	37	45	40	49	52	47
5 months and under 6 months.....	69	41	51	49	33	45	41	31	30	43
6 months and under 7 months.....	28	29	52	41	27	48	24	25	54	36
7 months and under 8 months.....	21	27	30	37	30	32	34	31	28	33
8 months and under 9 months.....	14	26	25	32	21	30	27	26	35	28
9 months and under 10 months.....	14	23	38	34	23	27	24	18	30	29
10 months and under 11 months.....	28	17	35	28	20	22	29	19	28	25
11 months and under 1 year.....	21	5	22	23	18	26	14	28	9	20
Totals.....	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1936.										
Under 1 month.....	540	472	511	480	566	489	527	496	484	507
Under 1 day.....	204	150	165	142	239	198	189	186	200	178
1 day and under 1 week.....	197	207	228	180	215	200	182	178	198	194
1 week and under 2 weeks.....	66	51	53	73	50	45	68	48	41	61
2 weeks and under 3 weeks.....	22	27	36	46	34	17	44	50	22	39
3 weeks and under 1 month.....	51	37	29	40	28	30	45	34	24	35
1 month and under 2 months.....	117	109	96	110	83	76	79	82	95	97
2 months and under 3 months.....	95	104	98	86	69	62	87	84	60	82
3 months and under 4 months.....	36	77	57	62	56	59	62	63	69	61
4 months and under 5 months.....	58	63	40	50	46	59	45	54	56	50
5 months and under 6 months.....	51	42	32	40	34	54	38	47	32	39
6 months and under 7 months.....	7	32	38	42	29	35	32	35	37	36
7 months and under 8 months.....	36	19	17	32	31	40	33	31	43	31
8 months and under 9 months.....	15	17	36	27	28	37	28	34	26	28
9 months and under 10 months.....	15	24	29	27	21	28	27	31	30	26
10 months and under 11 months.....	15	26	29	21	20	32	27	23	32	23
11 months and under 1 year.....	15	15	17	21	17	30	15	20	37	20
Totals.....	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

¹ Exclusive of the Territories.

Infantile Mortality in Canadian Cities and Towns.—Table 26 shows for the cities and towns of 10,000 population and over, the numbers of infant deaths and the death rates per 1,000 live births for the years 1934-36. But a very low rate for any particular year means little since wide fluctuations from year to year are the rule. Moreover, since maternity hospitals in many urban centres draw patients from surrounding districts, the rates based on place of occurrence, shown in Table 26, are often quite different from rates based on place of residence. This is illustrated particularly in the case of Westmount, where the number of infant deaths under one year by place of occurrence in 1936 was 29 compared with 9 by place of residence. Vancouver, B.C., has a splendid record among the large cities over the three years. Three Rivers, Westmount, Sorel, Glace Bay, Joliette, and Quebec city have all rates of over 100 for 1936, and most of them have high rates over the three-year period. Apart from Vancouver, already mentioned, among the large cities Montreal has recorded steady improvement over the period and Winnipeg and Toronto have very low rates and good records.

The infantile mortality in the cities of Canada has been greatly reduced in the years since the inauguration of Dominion vital statistics. Thus the rate for Toronto has fallen from 90 in 1921 to 51 in 1936, that for Winnipeg from 78 to 39, for Vancouver from 56 to 33, for Hamilton from 88 to 42, for Ottawa from 130 to 88, for London from 92 to 55, for Edmonton from 89 to 41, for Halifax from 135 to 59, for Saint John from 147 to 69. Altogether, in the 13 cities of 40,000 population and over in the former registration area of Canada, there were 41,923 live births in 1921

and 3,833 infant deaths, being a rate of 91 per 1,000 live births. In 1936 in these same cities there were 35,616 live births but only 1,795 infant deaths, or a rate of 50 per 1,000 live births.

26.—Deaths and Death Rates of Children Under One Year of Age (Exclusive of Still-births) in Cities and Towns of 10,000 and Over, 1934-36, with Averages, 1926-33 and 1931-35.

City or Town.	Infant Deaths.					Rates per 1,000 Live Births.				
	Average 1926-30.	Average 1931-35.	1934.	1935.	1936.	Average 1926-30.	Average 1931-35.	1934.	1935.	1936.
Belleville, Ont.	27	20	17	25	31	72	53	46	66	72
Brandon, Man.	26	18	12	15	20	67	59	44	57	80
Brantford, Ont.	52	34	26	35	31	76	54	45	58	47
Calgary, Alta.	113	74	66	73	86	62	44	41	45	53
Charlottetown, P.E.I.	30	26	26	26	30	105	72	73	74	74
Chatham, Ont.	38	33	26	35	28	78	68	51	66	48
Chicoutimi, Que.	72	57	56	45	43	129	112	115	89	85
Cornwall, Ont.	48	38	53	32	50	102	79	122	53	89
Edmonton, Alta.	140	109	101	75	94	66	49	47	33	41
Fort William, Ont.	46	32	20	29	27	73	57	42	55	56
Galt, Ont.	16	15	16	16	10	57	51	55	58	37
Glance Bay, N.S.	85	69	65	85	89	127	98	91	109	111
Granby, Que.	29	28	29	32	30	96	79	83	104	100
Guelp, Ont.	23	20	17	16	11	59	57	52	47	37
Halifax, N.S.	127	119	118	105	104	87	73	73	63	59
Hamilton, Ont.	200	167	148	135	115	66	56	54	49	42
Hull, Que.	132	102	70	91	76	132	117	82	112	92
Joliette, Que.	52	35	39	24	30	149	106	137	72	104
Kingston, Ont.	59	38	37	29	46	99	58	61	42	68
Kitchener, Ont.	43	35	36	34	34	58	47	50	45	46
Lachine, Que.	49	29	24	20	22	111	73	65	57	62
Lethbridge, Alta.	33	34	23	30	25	76	64	50	52	43
Lévis, Que.	37	25	19	15	18	120	96	79	65	85
London, Ont.	91	77	64	70	77	66	56	48	49	55
Moncton, N.B.	40	24	19	21	23	76	49	40	46	47
Montreal, Que.	2,735	1,862	1,635	1,550	1,410	135	98	89	87	81
Moose Jaw, Sask.	39	24	15	15	23	62	52	35	35	51
New Westminster, B.C.	27	24	25	26	30	51	43	46	47	47
Niagara Falls, Ont.	31	21	22	20	9	66	50	54	46	23
North Bay, Ont.	35	23	24	18	28	85	59	65	46	71
Oshawa, Ont.	53	29	34	22	31	83	55	67	42	59
Ottawa, Ont.	327	257	200	286	297	110	87	71	94	88
Outremont, Que.	8	5	6	5	3	65	53	73	60	44
Owen Sound, Ont.	15	16	15	11	12	46	50	46	34	37
Peterborough, Ont.	39	35	23	36	45	67	61	42	63	72
Port Arthur, Ont.	45	24	28	13	21	83	47	59	25	39
Prince Albert, Sask.	34	27	25	33	22	102	68	57	70	51
Quebec, Que.	727	538	497	390	389	166	130	124	101	101
Regina, Sask.	92	61	54	59	61	67	48	44	50	53
St. Boniface, Man.	59	46	31	46	36	70	43	30	42	32
St. Catharines, Ont.	40	27	28	20	34	67	46	46	36	59
St. Hyacinthe, Que.	55	42	30	35	29	166	119	91	98	77
St. Jean, Que.	26	19	16	13	23	79	64	54	65	75
St. Thomas, Ont.	20	16	17	18	17	60	54	53	61	58
Saint John, N.B.	113	91	80	72	84	99	76	66	62	69
Sarnia, Ont.	32	22	21	22	22	74	53	53	52	51
Saskatoon, Sask.	86	48	47	27	34	81	50	55	31	38
Sault Ste. Marie, Ont.	42	25	27	20	40	69	44	55	38	72
Shawinigan Falls, Que.	103	53	35	42	45	157	93	66	82	85
Sherbrooke, Que.	77	61	60	58	45	97	81	82	78	57
Sorel, Que.	56	36	29	36	30	187	136	117	153	125
Stratford, Ont.	21	19	13	23	9	55	56	41	66	26
Sudbury, Ont.	54	66	45	55	73	108	83	59	63	75
Sydney, N.S.	40	26	29	24	18	77	44	49	41	30
Thetford Mines, Que.	52	32	31	32	24	113	91	85	109	82
Three Rivers, Que.	228	237	343	251	272	171	200	287	222	243
Timmins, Ont.	60	57	60	53	55	123	101	102	84	80
Toronto, Ont.	914	673	517	538	527	75	59	49	51	51
Valleyfield, Que.	40	31	28	31	20	126	87	76	87	58
Vancouver, B.C.	173	117	80	93	113	46	35	25	29	33
Verdun, Que.	91	68	57	58	48	86	67	62	68	54
Victoria, B.C.	33	23	22	19	19	46	33	31	27	27
Welland, Ont.	20	19	17	13	18	69	66	67	42	58
Westmount, Que.	11	33	37	30	29	102	105	119	112	139
Windsor, Ont. ¹	203	106	89	99	93	73	52	47	49	44
Winnipeg, Man.	277	170	156	155	140	61	43	42	42	39
Woodstock, Ont.	14	12	10	10	8	58	51	47	45	34

¹ Includes East Windsor, Sandwich, and Walkerville, which were shown separately previous to the publication of the 1937 Year Book.

Infantile Mortality in Various Countries.—The rate of infantile mortality to live births has been greatly reduced in civilized countries by the recent advances in medical science and in sanitation. The low record is held at the present time by New Zealand, where in 1935 the rate of infantile mortality was only 32 per 1,000 live births as compared with 68 in 1905. The Netherlands, Norway, Sweden, and Switzerland, with rates of 40, 44, 47 and 48 in their latest available year (1935) are the lowest among European countries.

As showing the improvement in recent years, it may be stated that the rate of infantile mortality in England and Wales has been reduced from 128 per 1,000 live births in 1905 to 57 in 1935, while the rate in Germany has declined from 196 in 1904 to 69 in 1935. In the Netherlands, again, the rate has declined from 131 per 1,000 live births in 1905 to 40 in 1935. Statistics are given in Table 27 by leading countries and by provinces.

27.—Infantile Mortality per 1,000 Live Births in Various Countries of the World and Provinces of Canada in Recent Years.

Country.	Year.	Rate of Infantile Mortality.	Country or Province.	Year.	Rate of Infantile Mortality.
Country—			Country—concluded.		
New Zealand.....	1935	32	Greece.....	1935	113
Netherlands.....	1935	40	Newfoundland.....	1935	119
Australia.....	1935	40	Czechoslovakia.....	1935	123
Norway.....	1935	44	Lithuania.....	1935	123
Sweden.....	1935	47	Palestine.....	1935	131
Switzerland.....	1935	48	Salvador.....	1934	136
United States (reg. area).....	1935	56	Jamaica.....	1935	137
England and Wales.....	1935	57	Hungary.....	1935	152
British Isles.....	1935	61	Bulgaria.....	1935	154
Union of South Africa (whites)	1935	63	Costa Rica.....	1935	157
Canada.....	1936	66	Egypt.....	1935	161
Finland.....	1935	67	British India.....	1935	164
Iceland.....	1935	68	Straits Settlements.....	1935	165
Irish Free State.....	1935	68	Roumania.....	1935	192
France.....	1935	69	Chile.....	1935	251
Germany.....	1935	69	Ceylon.....	1935	263
Denmark.....	1935	71			
Scotland.....	1935	77	Province of Canada—		
Latvia.....	1935	79	British Columbia.....	1936	44
Belgium.....	1935	85	Saskatchewan.....	1936	54
Northern Ireland.....	1935	86	Ontario.....	1936	55
Estonia.....	1935	89	Alberta.....	1936	60
Panama.....	1934	95	Manitoba.....	1936	61
Uruguay.....	1934	96	Nova Scotia.....	1936	66
Austria.....	1935	99	Prince Edward Island.....	1936	69
Italy.....	1935	101	New Brunswick.....	1936	77
Japan.....	1935	107	Quebec.....	1936	83
Spain.....	1935	109			

Infantile Mortality in Certain Cities of the World.—It is one of the greatest triumphs of our time that city life is in our day, if not as healthy, yet not necessarily more dangerous to human, especially to infant, life than the average living conditions in the country as a whole.

To give particular examples, the rate of infantile mortality in New York was 52 per 1,000 live births in 1934, as against a rate of 60 per 1,000 for the birth registration area of the United States. In 1935 Berlin had an infantile mortality rate of 63 per 1,000 live births, as compared with 69 for Germany. On the other hand, Paris had a rate of 76 in 1934, compared with a rate of 69 for France in the same year, and in 1935, London a rate of 58 compared with 57 for England and Wales.

In Canada, Montreal had, in 1935, an infantile mortality of 87 per 1,000 live births as compared with 92 for the province of Quebec. Toronto had, in 1935, an infantile mortality rate of 51 per 1,000 live births as against 56 for the province

of Ontario, while Winnipeg and Vancouver had much lower infantile mortality rates than their respective provinces. Over a number of years both Vancouver and Victoria have shown two of the lowest infantile mortality rates in the world.

28.—Infantile Mortality per 1,000 Live Births in Certain Cities of the World in 1935.

City.	Country.	Rate of Infantile Mortality.	City.	Country.	Rate of Infantile Mortality.
Oslo.....	Norway.....	26	Hamburg.....	Germany.....	51
Victoria.....	Canada.....	27	Sheffield.....	England.....	52
Amsterdam.....	Netherlands.....	28	Capetown.....	U. of S. Africa.....	52
Vancouver.....	Canada.....	29	Brandon.....	Canada.....	57
Saskatoon.....	Canada.....	31	London.....	England.....	58
Wellington.....	New Zealand.....	33	Washington.....	United States.....	60
Edmonton.....	Canada.....	33	Saint John.....	Canada.....	62
Stockholm.....	Sweden.....	35	Breslau.....	Germany.....	62
Adelaide.....	Australia.....	35	Berlin.....	Germany.....	63
Sydney.....	Australia.....	36	Halifax.....	Canada.....	63
Chicago.....	United States.....	40	Munich.....	Germany.....	63
Perth.....	Australia.....	40	Birmingham.....	England.....	65
Auckland.....	New Zealand.....	41	Paris.....	France.....	66
Antwerp.....	Belgium.....	41	Leipzig.....	Germany.....	66
Winnipeg.....	Canada.....	42	Cologne.....	Germany.....	67
Brisbane.....	Australia.....	42	Verdun.....	Canada.....	68
Melbourne.....	Australia.....	43	Edinburgh.....	Scotland.....	70
Calgary.....	Canada.....	45	Manchester.....	England.....	71
Moncton.....	Canada.....	46	Hobart.....	Tasmania.....	73
Copenhagen.....	Denmark.....	47	Cork.....	Irish Free State.....	78
New York.....	United States.....	47	Johannesburg.....	U. of S. Africa.....	84
Dresden.....	Germany.....	48	Liverpool.....	England.....	84
Windsor.....	Canada.....	49	Montreal.....	Canada.....	87
Hamilton.....	Canada.....	49	Ottawa.....	Canada.....	94
London.....	Canada.....	49	Glasgow.....	Scotland.....	98
Regina.....	Canada.....	50	Quebec.....	Canada.....	101
Frankfort-on-Main.....	Germany.....	51	Madras.....	British India.....	224
Toronto.....	Canada.....	51	Bombay.....	India.....	245

Maternal Mortality.—Of cognate interest with infantile mortality is the maternal mortality arising out of pregnancy and child-birth. This maternal mortality is shown by Table 29 to be at its lowest among mothers under twenty-five years of age. The mortality among mothers of different ages per 1,000 live births is shown for the years 1934-36; averages are also shown for the years 1926-30 and 1931-35. The maternal mortality is shown by provinces and age groups in Table 30 and by causes of death in Table 31,

29.—Maternal Deaths in Canada, by Age Groups, with Rates per 1,000 Live Births, 1934-36, and Five-Year Averages for 1926-30 and 1931-35.

NOTE.—Comparable figures for 1926-32 will be found at p. 208 of the 1934-35 Year Book, and for 1933 at p. 186 of the 1937 Year Book.

Age Group.	Year.	Living Births.	Maternal Deaths.		Age Group.	Year.	Living Births.	Maternal Deaths.	
			No.	Rate per 1,000 Living Births.				No.	Rate per 1,000 Living Births.
Under 20 years..	1934	13,454	67	5.0	40 years or over..	1934	13,610	155	11.3
	1935	13,671	47	3.4		1935	13,217	116	8.7
	1936	13,576	59	4.3		1936	12,888	157	12.2
20-24 years.....	1934	55,137	211	3.8	Averages.....	1926-30	236,520	1,339	5.7
	1935	56,245	202	3.6		1931-35	228,352	1,154	5.1
	1936	56,627	230	4.1					
25-29 years.....	1934	61,911	236	3.8	Totals ¹	1934	221,303	1,167	5.3
	1935	62,296	261	4.2		1935	221,451	1,093	4.9
	1936	61,969	272	4.4		1936	220,371	1,233	5.6
30-39 years.....	1934	77,186	498	6.5	Totals ¹	1934	221,303	1,167	5.3
	1935	76,022	467	6.1		1935	221,451	1,093	4.9
	1936	75,311	515	6.8		1936	220,371	1,233	5.6

¹ Includes "ages not stated".

30.—Maternal Deaths in each Province by Age Groups, 1936, with Totals and Rates per 1,000 Live Births for 1934-36, and Five-Year Averages for 1926-30 and 1931-35.

NOTE.—For totals 1926-30, see p. 183 of the Canada Year Book, 1933, and for totals 1931-33, p. 182 of the 1936 edition.

Year and Age Group.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada. ¹
Maternal Deaths—										
Averages, 1926-30.....	8	61	64	433	398	81	126	105	63	1,339
Averages, 1931-35.....	10	59	57	405	344	60	91	75	53	1,154
Totals, 1934.....	10	71	52	418	348	51	86	81	50	1,167
Totals, 1935.....	8	62	48	405	313	56	80	69	52	1,093
Totals, 1936.....	11	51	69	450	355	70	86	91	50	1,233
1936.										
Under 20 years.....	Nil	2	6	12	20	9	2	7	1	59
20-24 years.....	1	19	9	71	68	15	15	20	12	230
25-29 years.....	4	8	14	98	81	14	19	18	16	272
30-39 years.....	4	17	32	201	143	25	39	34	20	515
40 years or over.....	2	5	8	68	43	7	11	12	1	157
Age not stated.....	-	-	-	-	-	-	-	-	-	Nil
Rates per 1,000 Live Births—										
Averages, 1926-30.....	4.6	5.5	6.2	5.2	5.8	5.6	5.9	6.6	6.1	5.7
Averages, 1931-35.....	5.1	5.1	5.5	5.1	5.3	4.4	4.5	4.5	5.3	5.1
Totals, 1934.....	5.1	6.2	5.1	5.5	5.6	3.8	4.4	5.0	5.1	5.3
Totals, 1935.....	4.0	5.3	4.6	5.4	5.0	4.2	4.1	4.3	5.2	4.9
Totals, 1936.....	5.6	4.3	6.6	6.0	5.7	5.4	4.5	5.8	4.7	5.6

¹ Exclusive of Yukon and the Northwest Territories.

31.—Maternal Deaths in each Province, by Causes of Death, 1936.

Int. List No.	Cause of Death.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada. ¹
140	Abortion with septic conditions.....	Nil	2	7	43	29	7	10	19	18	135
	(a) Abortion.....	Nil	2	5	36	21	5	9	13	13	104
	(b) Self-induced abortion.....	Nil	Nil	2	7	8	2	1	6	5	31
141	Abortion without mention of septic conditions (hæmorrhage included).....	Nil	2	1	16	20	3	3	5	3	53
	(a) Abortion.....	Nil	2	1	13	15	2	3	4	2	42
	(b) Self-induced abortion.....	Nil	Nil	Nil	3	5	1	Nil	1	1	11
142	Ectopic gestation.....	Nil	Nil	Nil	9	16	4	5	4	Nil	38
	(a) With septic conditions.....	Nil	Nil	Nil	3	1	1	Nil	2	Nil	7
	(b) Without mention of septic conditions.....	Nil	Nil	Nil	6	15	3	5	2	Nil	31
143	Other accidents of pregnancy (hæmorrhage excluded).....	Nil	Nil	1	2	2	1	Nil	Nil	Nil	6
144	Puerperal hæmorrhage....	3	5	11	69	34	5	12	10	5	154
	(a) Placenta prævia.....	2	3	2	36	18	3	6	4	2	76
	(b) Other hæmorrhages.....	1	2	9	33	16	2	6	6	3	78
145	Puerperal septicæmia (not specified as due to abortion).....	1	10	14	129	85	20	17	22	7	305
	(a) Puerperal septicæmia and pyæmia.....	1	10	14	128	85	20	17	22	7	304
	(b) Puerperal tetanus....	Nil	Nil	Nil	1	Nil	Nil	Nil	Nil	Nil	1
146	Puerperal albuminuria and eclampsia.....	4	14	20	95	64	13	16	10	4	240

¹ Exclusive of Yukon and the Northwest Territories.

31.—Maternal Deaths in each Province, by Causes of Death, 1936—concluded.

Int. List No.	Cause of Death.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada. ¹
147	Other toxæmias of pregnancy.....	Nil	5	4	18	21	4	2	10	3	67
148	Puerperal phlegmasia alba dolens, embolism or sudden death (not specified as septic).....	3	4	6	30	28	5	13	4	2	95
	(a) Phlegmasia alba dolens and thrombosis.....	Nil	Nil	2	5	8	2	5	Nil	1	23
	(b) Embolism.....	2	3	3	14	18	2	6	4	Nil	52
	(c) Sudden death.....	1	1	1	11	2	1	2	Nil	1	20
149	Other accidents of childbirth.....	Nil	9	5	37	50	7	7	6	8	129
	(a) Cæsarean operation.....	Nil	4	2	4	16	2	Nil	1	1	30
	(b) Other surgical operations and instrumental delivery.....	Nil	2	Nil	1	2	1	1	2	1	10
	(c) Dystocia.....	Nil	1	Nil	13	19	2	4	3	2	44
	(d) Rupture of uterus in parturition.....	Nil	1	Nil	4	4	1	Nil	Nil	1	11
	(e) Others under this title.....	Nil	1	3	15	9	1	2	Nil	3	34
150	Other or unspecified conditions of the puerperal state.....	Nil	Nil	Nil	2	6	1	1	1	Nil	11
	(a) Puerperal diseases of the breast.....	Nil	Nil	Nil	Nil	Nil	Nil	1	Nil	Nil	1
	(b) Others under this title.....	Nil	Nil	Nil	2	6	1	Nil	1	Nil	10
	Totals.....	11	51	69	450	355	70	86	91	50	1,233

¹ Exclusive of Yukon and the Northwest Territories.

As compared with the previous year, the number of maternal deaths shows an increase of 140, or 13 p.c., but the decrease from 1930 is over 12 p.c. Decreases are shown for Nova Scotia and British Columbia, but elsewhere increases are recorded as compared with 1935. By far the most serious causes of maternal mortality are puerperal septicæmia, and puerperal albuminuria and eclampsia, and deaths from these causes increased from 605 in 1935 to 687 in 1936, or by 13.6 p.c.

Section 4.—Natural Increase.

Natural increase is a resultant of births and deaths, and its treatment is felt to come, logically, at this place rather than at the beginning of the chapter, as in former editions of the Year Book.

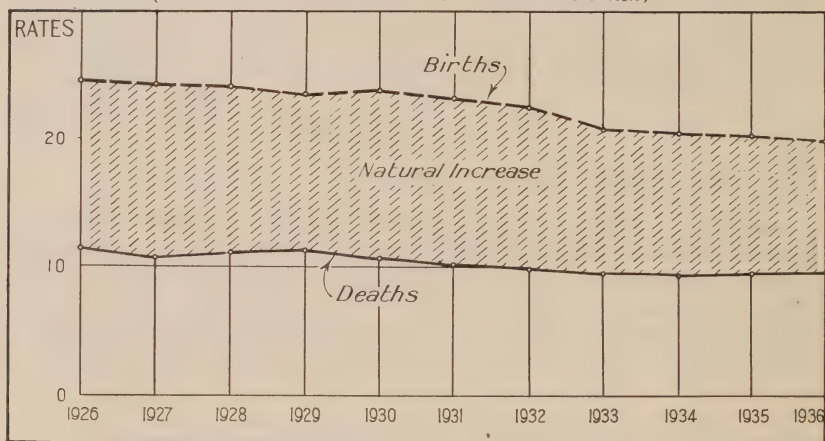
Summary statistics of the births, deaths, and natural increase (births minus deaths) per 1,000 of population are given for the years 1921 to 1936, by provinces, in Table 32. Statistics of marriages are also included in this table for convenience. The province of Quebec is regarded as having one of the highest rates of natural increase per 1,000 population of any civilized area. The rate was 17.1 in 1931 and, while it has been appreciably reduced in line with common experience, it stood at 14.0 in 1936. Saskatchewan has usually approached Quebec in the matter of natural increase and for the years 1934 and 1935 the rates for this prairie province exceeded those for Quebec. New Brunswick and Alberta follow in the order given. In the case of the two western provinces the high rates of natural increase are due to their relatively younger populations and lower crude death rates, but in the case of New Brunswick the condition of an abnormally high birth rate combined with a

high death rate exists. The high rates for these provinces brought the averages for Canada up to 11.1 in 1934, 10.6 in 1935, and 10.3 in 1936, in spite of the fact that the rate for British Columbia, which has always been low, was only 4.5 in 1936. The rate of natural increase in 1935 was 13.7 per 1,000 in the Union of South Africa (whites), 7.9 in New Zealand, 7.1 in Australia, 5.6 in the Irish Free State, 4.8 in Northern Ireland, 4.6 in Scotland, and 3.0 in England and Wales, so that Canada compares quite favourably with most other British countries.

The rates of natural increase per 1,000 of the mean population for other countries in the latest years are as follows, the figures being for 1935: Netherlands, 11.5; Japan, 14.8; Spain, 9.9; Italy, 9.4; Denmark, 6.6; Germany, 7.1; United States, 6.0; Finland, 6.5; Switzerland, 3.9; Norway, 4.0; Belgium, 2.6; Sweden, 2.1; France, -0.5.

BIRTH RATES, DEATH RATES AND RATES OF NATURAL INCREASE IN CANADA 1926-1936

RATES PER 1000 POPULATION
(Exclusive of the Northwest Territories and Yukon)



During recent years the rate of natural increase of the population of Canada has declined. In 1921 the rate was 17.8; it declined to 13.3 in 1926 and to 12.2 in 1929. After 1929 there was a temporary improvement but, as Table 32 shows, the rates for 1934, 1935, and 1936—11.1, 10.6 and 10.3, respectively—continued the downward trend. Among the provinces the trends generally follow that of Canada as a whole, except in the Maritime Provinces, for each of which the trend is not so regularly downward and has, in fact, been upward since 1934. Quebec shows the greatest improvement in death rate for the period since 1926. The birth rate is declining here as elsewhere and the rate of natural increase has shown a definitely downward trend, although not so markedly as that of Saskatchewan.

Statistics of natural increase in cities and towns of 10,000 population and over are given for the period 1926-36 in Table 33, but these are not worked out as rates per thousand of population, though the census populations in 1931, which are also given, furnish some guide to such rates.

32.—Summary of Births, Marriages, Deaths, and Natural Increase, by Provinces, for the calendar years 1934-36, with Averages for 1921-25, 1926-30, and 1931-35.

NOTE.—For other than census years birth, marriage, and death rates are calculated on estimated population (see p. 155). Figures for individual years 1921-25 will be found at p. 160 of the 1927-28 Year Book; for 1926-30 at p. 150 of the 1933 Year Book; for 1931-32 at p. 147 of the 1936 edition; and for 1933 at p. 190 of the 1937 Year Book.

Province.	Births.	Birth Rate per 1,000 Population.	Marriages.	Marriage Rate per 1,000 Population.	Deaths.	Death Rate per 1,000 Population.	Excess of Births over Deaths.	Rate of Natural Increase per 1,000 Population.
Prince Edward Island.	Av. 1921-25	1,966	22.6	473	5.4	1,085	881	10.1
	Av. 1926-30	1,734	19.7	473	5.4	969	765	8.7
	Av. 1931-35	1,961	22.1	496	5.6	1,001	961	10.8
	1934	1,943	21.8	536	6.0	1,033	910	10.2
	1935	2,010	22.6	516	5.8	975	1,035	11.6
	1936	1,977	21.5	595	6.5	1,024	953	10.4
Nova Scotia.....	Av. 1921-25	12,119	23.4	3,186	6.1	6,519	5,600	10.8
	Av. 1926-30	11,016	21.4	3,224	6.3	6,362	4,654	9.0
	Av. 1931-35	11,486	22.0	3,522	6.8	6,073	5,413	10.3
	1934	11,467	21.7	3,756	7.2	6,028	5,379	10.2
	1935	11,617	22.0	3,946	7.5	6,164	5,453	10.3
	1936	11,808	22.0	4,129	7.7	5,897	5,911	11.0
New Brunswick.....	Av. 1921-25	11,080	28.4	2,953	7.6	5,093	5,987	15.3
	Av. 1926-30	10,327	25.8	2,970	7.4	5,019	5,308	13.3
	Av. 1931-35	10,440	24.9	2,737	6.5	4,710	5,730	13.7
	1934	10,164	23.9	3,045	7.2	4,665	5,499	12.9
	1935	10,388	24.2	3,200	7.5	4,779	5,609	13.1
	1936	10,513	24.2	3,397	7.8	4,803	5,710	13.2
Quebec ¹	Av. 1926-30	82,771	30.5	18,731	6.9	36,645	46,126	17.0
	Av. 1931-35	78,889	26.6	17,089	5.8	32,796	46,093	15.5
	1934	76,432	25.3	18,242	6.0	31,929	44,503	14.7
	1935	75,267	24.6	19,967	6.5	32,839	42,428	13.9
	1936	75,285	24.3	21,654	7.0	31,853	43,432	14.0
Ontario.....	Av. 1921-25	71,454	23.7	24,037	8.0	34,252	37,202	12.4
	Av. 1926-30	68,703	21.0	25,449	7.8	36,650	32,053	9.8
	Av. 1931-35	65,000	18.3	24,260	6.8	35,782	29,218	8.2
	1934	62,234	17.1	25,874	7.1	35,119	27,115	7.4
	1935	63,069	17.2	26,843	7.3	36,317	26,752	7.3
	1936	62,451	16.9	27,734	7.5	37,571	24,880	6.7
Manitoba.....	Av. 1921-25	16,590	26.8	4,634	7.5	5,348	11,242	13.2
	Av. 1926-30	14,391	21.7	4,951	7.5	5,507	8,884	13.4
	Av. 1931-35	13,690	19.3	5,015	7.1	5,413	8,277	11.7
	1934	13,310	18.7	5,296	7.4	5,169	8,141	11.4
	1935	13,335	18.8	5,341	7.5	5,781	7,554	10.7
	1936	12,855	18.1	5,756	8.1	6,219	6,636	9.4
Saskatchewan.....	Av. 1921-25	21,580	27.7	4,982	6.4	5,859	15,721	20.2
	Av. 1926-30	21,298	24.7	6,036	7.0	6,256	15,042	17.4
	Av. 1931-35	20,325	21.9	5,680	6.1	6,037	14,288	15.4
	1934	19,764	21.2	5,519	5.9	5,924	13,840	14.8
	1935	19,569	21.0	6,036	6.5	6,126	13,443	14.4
	1936	19,125	20.5	6,168	6.6	6,314	12,811	13.7
Alberta.....	Av. 1921-25	15,461	26.0	4,313	7.3	4,953	10,508	17.7
	Av. 1926-30	15,924	24.2	5,265	8.0	5,530	10,394	15.8
	Av. 1931-35	16,556	22.1	5,530	7.4	5,447	11,109	14.8
	1934	16,236	21.5	6,053	8.0	5,337	10,899	14.4
	1935	16,183	21.2	6,010	7.9	5,729	10,454	13.7
	1936	15,786	20.4	6,020	7.8	6,147	9,639	12.4
British Columbia.....	Av. 1921-25	10,256	18.4	3,971	7.1	4,812	5,444	9.7
	Av. 1926-30	10,356	16.2	4,786	7.5	5,986	4,370	6.9
	Av. 1931-35	10,005	14.0	4,267	6.0	6,344	3,661	5.1
	1934	9,813	13.5	4,771	6.6	6,378	3,435	4.7
	1935	10,013	13.6	5,034	6.8	6,857	3,156	4.3
	1936	10,571	14.1	5,451	7.3	7,222	3,349	4.5
Canada ¹ (Exclusive of the Territories).....	Av. 1926-30	236,520	24.1	71,885	7.3	108,924	127,596	13.0
	Av. 1931-35	228,352	21.4	68,596	6.4	103,603	124,750	11.7
	1934	221,303	20.5	73,092	6.8	101,582	119,721	11.1
	1935	221,451	20.3	76,893	7.0	105,567	115,884	10.6
	1936	220,371	20.0	80,904	7.3	107,050	113,321	10.3

¹Quebec was not included in the registration area prior to 1926.

33.—Natural Increase in Cities and Towns of 10,000 Population or Over, 1932-36, and Averages, 1926-30, and 1931-35.

Province and City or Town.	Census Popula- tion, 1931.	Averages.		1932.	1933.	1934.	1935.	1936.
		1926-30.	1931-35.					
Prince Edward Island—								
Charlottetown.....	12,361	23	99	103	85	90	102	128
Nova Scotia—								
Glace Bay.....	20,706	378	445	457	367	459	510	530
Halifax.....	59,275	573	732	689	708	680	805	884
Sydney.....	23,089	270	374	397	299	360	356	425
New Brunswick—								
Moncton.....	20,689	266	249	252	197	240	212	260
Saint John.....	47,514	432	536	590	401	585	578	575
Quebec—								
Chicoutimi.....	11,877	325	284	358	252	238	268	243
Granby.....	10,587	183	239	254	272	238	187	169
Hull.....	29,433	647	515	512	509	518	447	517
Joliette.....	10,765	174	157	196	159	115	166	126
Lachine.....	18,630	228	212	234	194	186	155	173
Lévis.....	11,724	84	42	55	57	41	23	25
Montreal.....	818,577	8,945	9,194	9,332	9,210	9,202	8,209	7,980
Outremont.....	28,641	19	-66	-37	-72	-97	-94	-99
Quebec.....	130,594	2,110	2,146	2,244	2,006	2,143	2,009	1,927
St. Hyacinthe.....	13,448	45	59	36	45	76	64	71
St. Jean.....	11,256	204	170	173	167	184	136	146
Shawinigan Falls.....	15,345	459	413	476	400	389	353	373
Sherbrooke.....	28,933	336	310	331	314	299	257	338
Sorel.....	10,320	130	124	149	117	121	75	111
Thetford Mines.....	10,701	308	212	243	159	232	136	145
Three Rivers.....	35,450	773	577	704	452	520	513	466
Valleyfield.....	11,411	137	204	213	179	215	212	171
Verdun.....	60,745	659	561	707	594	462	333	438
Westmount.....	24,235	-33	64	47	74	33	24	-60
Ontario—								
Belleville.....	13,790	140	149	121	141	158	132	171
Brantford.....	30,107	300	265	289	254	225	247	263
Chatham.....	14,569	185	181	150	180	241	192	253
Cornwall.....	11,126	230	248	202	256	194	361	303
Fort William.....	26,277	420	355	392	337	288	314	266
Galt.....	14,006	105	109	118	81	93	81	98
Guelph.....	21,075	160	117	133	120	85	115	95
Hamilton.....	155,547	1,568	1,467	1,601	1,458	1,268	1,216	1,119
Kingston.....	23,439	119	181	157	240	157	155	186
Kitchener.....	30,793	451	405	344	339	417	393	359
London.....	71,148	292	359	331	262	332	377	306
Niagara Falls.....	19,046	251	221	210	192	203	250	182
North Bay.....	15,528	268	235	247	249	192	218	222
Oshawa.....	23,439	429	339	332	302	315	347	302
Ottawa.....	126,872	1,301	1,247	1,300	1,172	1,206	1,218	1,241
Owen Sound.....	12,839	171	138	99	137	159	133	144
Peterborough.....	22,327	271	253	263	277	192	248	247
Port Arthur.....	19,818	318	314	329	331	288	335	323
St. Catharines.....	24,753	279	306	303	292	334	247	266
St. Thomas.....	15,430	100	69	67	33	99	46	25
Sarnia.....	18,191	209	189	155	143	180	223	172
Sault Ste. Marie.....	23,082	395	360	431	377	279	303	316
Stratford.....	17,742	184	141	140	109	129	129	148
Sudbury.....	18,518	283	562	554	505	538	635	652
Timmins.....	14,200	345	392	362	382	420	449	497
Toronto.....	631,207	5,475	4,890	5,468	4,801	4,349	3,869	3,347
Welland.....	10,709	126	148	146	171	102	173	167
Windsor.....	98,179	1,826	1,200	1,155	1,128	1,039	1,179	1,229
Woodstock.....	11,395	73	60	69	65	19	46	43
Manitoba—								
Brandon.....	16,461 ²	146	78	87	81	61	30	11
St. Boniface.....	16,275 ²	361	647	722	633	656	631	630
Winnipeg.....	215,814 ²	2,770	2,232	2,382	2,130	2,065	1,836	1,541

¹ Includes East Windsor, Sandwich, and Walkerville.² Census of 1936.

33.—Natural Increase in Cities and Towns of 10,000 Population or Over, 1932-36, and Averages, 1926-30, and 1931-35—concluded.

Province and City or Town.	Census Popula- tion, 1931.	Averages.		1932.	1933.	1934.	1935.	1936.
		1926-30.	1931-35.					
Saskatchewan—								
Moose Jaw.....	19,805 ¹	397	268	298	246	240	254	238
Prince Albert.....	11,049 ¹	181	223	186	193	267	282	228
Regina.....	53,354 ¹	887	802	793	717	783	661	610
Saskatoon.....	41,734 ¹	573	505	542	463	404	405	402
Alberta—								
Calgary.....	83,407 ¹	1,050	965	978	916	878	866	736
Edmonton.....	85,774 ¹	1,260	1,362	1,399	1,215	1,265	1,330	1,217
Lethbridge.....	13,523 ¹	251	338	329	319	246	390	391
British Columbia—								
New Westminster.....	17,524	252	271	287	249	267	254	284
Vancouver.....	246,593	1,601	1,056	1,149	949	968	782	703
Victoria.....	39,082	165	136	159	131	125	101	32

¹ Census of 1936.

Natural Increase, by Sex.—In Table 34 the relationship of births to deaths is shown by sex from 1926 to 1936 for Canada and for 1936 by provinces. In spite of higher male births, the natural increase is shown to be lower for males than females due to the higher mortality among the former.

34.—Births, Deaths, and Natural Increase in Canada,¹ by Provinces and for each Sex, 1936, with Totals, 1931-36 and Averages, 1926-30, and 1931-35.

Year and Province.	Males.			Females.			Both Sexes.
	Births.	Deaths.	Excess of Births over Deaths.	Births.	Deaths.	Excess of Births over Deaths.	Excess of Births over Deaths.
1936.							
Prince Edward Island.	1,044	534	510	933	490	443	953
Nova Scotia.....	6,127	3,157	2,970	5,681	2,740	2,941	5,911
New Brunswick.....	5,368	2,568	2,800	5,145	2,235	2,910	5,710
Quebec.....	38,578	16,456	22,122	36,707	15,397	21,310	43,432
Ontario.....	32,124	19,916	12,208	30,327	17,655	12,672	24,880
Manitoba.....	6,670	3,438	3,232	6,185	2,781	3,404	6,636
Saskatchewan.....	9,839	3,616	6,223	9,286	2,698	6,588	12,811
Alberta.....	8,081	3,610	4,471	7,705	2,537	5,168	9,639
British Columbia.....	5,458	4,433	1,025	5,113	2,789	2,324	3,349
Canada ¹ Av. 1926-30...	121,552	58,351	63,201	114,968	50,573	64,395	127,596
Av. 1931-35.....	117,142	55,967	61,175	111,210	47,635	63,575	124,750
Totals, 1931.....	123,622	56,529	67,093	116,851	47,988	68,863	135,956
Totals, 1932.....	121,082	56,153	64,929	114,584	48,224	66,360	131,289
Totals, 1933.....	114,388	54,725	59,663	108,480	47,243	61,237	120,900
Totals, 1934.....	113,323	55,224	58,099	107,980	46,358	61,622	119,721
Totals, 1935.....	113,293	57,206	56,087	108,158	48,361	59,797	115,884
Totals, 1936.....	113,289	57,728	55,561	107,082	49,322	57,760	113,321

¹ Exclusive of Yukon and the Northwest Territories.

CHAPTER VI.—IMMIGRATION AND COLONIZATION.*

While the great majority of French Canadians can trace their descent to ancestors who left the Old World 250 years ago or even longer, most English-speaking Canadians are comparative newcomers both to Canada and to this continent, though a considerable number of the United Empire Loyalist families had been resident in the old colonies for generations before they moved north to establish English-speaking settlements in what is now the Dominion of Canada. During the middle third of the nineteenth century, a great English-speaking migration entered the province of Ontario and made it for the first time more populous than the sister province of Quebec, thus bringing about the agitation for representation by population. Thereafter, immigration slackened until the dawn of the twentieth century brought another flood of settlers to the newly opened territories of the great Northwest, resulting in an increase of population between the censuses of 1901 and 1911 greater than the combined increase of the three decades from 1871 to 1901.

Immigration during the second decade of the twentieth century promised, at its commencement, to be even greater than during the first. In its first three years no fewer than 1,084,934 persons entered Canada for purposes of settlement, but the Great War, which commenced for Canada on Aug. 4, 1914, dried up the sources of our immigration in the United Kingdom and Continental Europe, where every able-bodied man was needed for the defence of his country. Immigrant arrivals from the United Kingdom in 1918 numbered only about 3,000, as compared with 150,000 in 1913; immigrant arrivals from Continental Europe numbered less than 3,000 in 1916, as compared with approximately 135,000 in 1914. Since the War, immigration to the Dominion has never approached that of the pre-war period.

Section 1.—Statistics of Immigration.

Immigration to Canada, as to other new countries, is generally greatest in "boom" periods, when capital as well as labour is leaving the older countries for the newer in order to secure the more remunerative investments generally to be found in virgin territories where the natural resources are still unexploited. In periods of depression, however, the sending abroad of both capital and labour is diminished, both preferring at such times to endure the ills which they know at home rather than take the risks of a new adventure at a distance. Indeed the depression which began about the close of 1929, with its accompanying unemployment and unsold surplus of farm products, raised the question whether it was desirable that Canada should accept immigrants in any considerable number. Therefore, the Government, on Aug. 14, 1930, passed an Order in Council whereby immigrants, except Britishers coming from the Mother Country or self-governing Dominions, and United States citizens coming from the United States, were allowed to come in only if they belonged to one of two classes—(a) wives and unmarried children under eighteen years of age, joining family heads established in Canada and in a position to look after their dependants; (b) agriculturists with sufficient money to begin farming in Canada. This limitation applies to the whole continent of Europe as well as to many other countries. Regulations affecting immigration from the British Isles, the British Dominions or the United States have not been

* Revised under the direction of F. C. Blair, Director of Immigration, Department of Mines and Resources, Ottawa.

changed but a policy of no solicitation has been rigidly adopted. In harmony with this policy the Department of Immigration and Colonization, during 1931, closed all its Canadian Government Information Bureaus in the United States and reduced its representation in the British Isles.

For many years the Immigration Regulations have contained a general provision that immigrants coming to Canada must have sufficient funds to look after themselves until employment is secured. Naturally, when employment is readily available a sum would be considered sufficient which would be insufficient in periods of unemployment, and the enforcement of this regulation is an important factor in reducing immigration at the present time. An Order in Council (Aug. 7, 1929), prohibiting the landing in Canada of any immigrant coming under contract or agreement, expressed or implied, to perform labour or service of any kind in Canada, is also in effect but this prohibition does not apply to farmers, farm labourers, or houseworkers. Under the Order, the Minister of Immigration and Colonization may admit any contract labourer if satisfied that his labour or service is required in Canada.

The number of immigrant settlers in Canada is shown by calendar years from 1852 to 1937 in Table 1, and the number of immigrant arrivals in Canada from the United Kingdom, the United States, and other countries, is given by years from 1908 in Table 2.

1.—Numbers of Immigrant Arrivals in Canada, calendar years 1852-1937.

Year.	Number.	Year.	Number.	Year.	Number	Year.	Number.
1852.....	29,307	1873.....	50,050	1895.....	18,790	1917.....	72,910
1853.....	29,464	1874.....	39,373	1896.....	16,835	1918.....	41,845
1854.....	37,263	1875.....	27,382	1897.....	21,716	1919.....	107,698
1855.....	25,296	1876.....	25,633	1898.....	31,900	1920.....	138,824
1856.....	22,544	1877.....	27,082	1899.....	44,543	1921.....	91,728
1857.....	33,854	1878.....	29,807	1900.....	41,681	1922.....	64,224
1858.....	12,339	1879.....	40,492	1901.....	55,747	1923.....	133,729
1859.....	6,300	1880.....	38,505	1902.....	89,102	1924.....	124,164
1860.....	6,276	1881.....	47,991	1903.....	138,660	1925.....	84,907
1861.....	13,589	1882.....	112,458	1904.....	131,252	1926.....	135,982
1862.....	18,294	1883.....	133,624	1905.....	141,465	1927.....	158,886
1863.....	21,000	1884.....	103,824	1906.....	211,353	1928.....	166,783
1864.....	24,779	1885.....	79,169	1907.....	272,409	1929.....	164,993
1865.....	18,958	1886.....	69,152	1908.....	143,326	1930.....	104,806
1866.....	11,427	1887.....	84,526	1909.....	173,694	1931.....	27,530
1867.....	14,666	1888.....	88,766	1910.....	286,839	1932.....	20,591
1868.....	12,765	1889.....	91,600	1911.....	331,288	1933.....	14,382
1869.....	18,630	1890.....	75,067	1912.....	375,756	1934.....	12,476
1870.....	24,706	1891.....	82,165	1913.....	400,870	1935.....	11,277
1871.....	27,773	1892.....	30,996	1914.....	150,484	1936.....	11,643
1872.....	36,578	1893.....	29,633	1915.....	36,665	1937.....	15,101
		1894.....	20,829	1916.....	55,914		

Sex and Conjugal Condition of Immigrants.—As shown by Table 3, the 11,643 immigrants who came to Canada in the calendar year 1936 included 4,818 males and 6,825 females, males constituting only 41·4 p.c. of the total, as compared with 41·3 p.c. in 1935. Prior to 1932 males normally exceeded females, as shown on p. 213 of the 1934-35 edition of the Year Book, where figures for the fiscal years 1911-34 will be found. Similar information for the calendar years 1929-36 is given in Table 4.

2.—Numbers of Immigrant Arrivals in Canada from the United Kingdom, the United States and Other Countries, calendar years 1908-37.

NOTE.—The 1936 edition of the Year Book showed, at p. 186, statistics of immigration on this basis, by calendar years from 1881 to 1900 and by fiscal years from 1901 to 1935.

Year.	Immigrant Arrivals from—			Total.	Year.	Immigrant Arrivals from—			Total.
	United Kingdom.	United States.	Other Countries.			United Kingdom.	United States.	Other Countries.	
1908.....	55,727	51,750	35,849	143,326	1923.....	70,110	16,716	46,903	133,729
1909.....	52,344	80,409	40,941	173,694	1924.....	57,612	16,042	50,510	124,164
1910.....	112,638	108,350	65,851	286,839	1925.....	35,362	17,717	31,828	84,907
1911.....	144,076	112,028	75,184	331,288	1926.....	48,819	20,944	66,219	135,982
1912.....	145,859	120,095	109,802	375,756	1927.....	52,940	23,818	82,128	158,886
1913.....	156,984	97,783	146,103	400,870	1928.....	55,848	29,933	81,002	166,783
1914.....	49,879	50,213	50,392	150,484	1929.....	66,801	31,852	66,340	164,993
1915.....	9,606	24,297	2,762	36,665	1930.....	31,709	25,632	47,465	104,806
1916.....	8,596	41,779	5,539	55,914	1931.....	7,678	15,195	4,657	27,530
1917.....	2,632	65,737	4,541	72,910	1932.....	3,327	13,709	3,555	20,591
1918.....	4,484	31,759	5,592	41,845	1933.....	2,304	8,500	3,578	14,382
1919.....	57,251	42,129	8,318	107,698	1934.....	2,166	6,071	4,239	12,476
1920.....	75,804	40,188	22,832	138,824	1935.....	2,103	5,291	3,883	11,277
1921.....	43,772	23,888	24,068	91,728	1936.....	2,197	4,876	4,570	11,643
1922.....	31,005	17,534	15,685	64,224	1937.....	2,859	5,555	6,687	15,101

3.—Sex and Conjugal Condition of Immigrants into Canada, by Age Groups, calendar years 1935 and 1936.

Year and Age Group.	Males.					Females.				
	Single.	Married.	Widowed.	Divorced.	Total.	Single.	Married.	Widowed.	Divorced.	Total.
1935.										
0-14.....	1,886	Nil	Nil	Nil	1,886	1,762	Nil	Nil	Nil	1,762
15-19.....	338	2	Nil	Nil	340	414	79	Nil	Nil	493
20-24.....	299	41	Nil	Nil	340	352	382	2	1	737
25-29.....	259	134	1	1	395	205	653	8	11	877
30-39.....	180	470	7	7	664	203	1,125	44	27	1,399
40-49.....	76	396	13	12	497	112	395	54	18	579
50 or over.....	49	371	100	14	534	88	301	372	13	774
Totals.....	3,087	1,414	121	34	4,656	3,136	2,935	480	70	6,621
1936.										
0-14.....	1,846	Nil	Nil	Nil	1,846	1,735	Nil	Nil	Nil	1,735
15-19.....	383	Nil	Nil	Nil	383	435	74	1	Nil	510
20-24.....	291	45	2	Nil	338	367	393	1	3	764
25-29.....	248	187	1	1	437	252	628	5	10	895
30-39.....	180	552	5	7	744	224	1,248	32	19	1,523
40-49.....	67	420	15	7	509	77	462	45	10	594
50 or over.....	70	395	92	4	561	98	352	345	9	804
Totals.....	3,085	1,599	115	19	4,818	3,188	3,157	429	51	6,825

4.—Sex Distribution of Immigrants as Adult Males, Adult Females, and Children, calendar years 1929-36.

Year.	Adult Males.	Adult Females.	Children under 18.		Total.
			Males.	Females.	
1929.....	75,814	47,425	23,213	18,541	164,993
1930.....	44,078	32,882	15,521	12,325	104,806
1931.....	7,280	9,728	5,645	4,877	27,530
1932.....	5,429	7,259	4,238	3,665	20,591
1933.....	3,691	5,749	2,500	2,442	14,382
1934.....	2,998	5,107	2,161	2,210	12,476
1935.....	2,550	4,593	2,106	2,028	11,277
1936.....	2,691	4,830	2,127	1,995	11,643

Racial Origins of Immigrants.—Where there is any considerable immigration into a democratic country, the racial and linguistic composition of the immigrants is of great importance. Canadians prefer that settlers should be of a readily assimilable type, already identified by race or language with one or other of the two great races now inhabiting this country and prepared for the duties of Canadian citizenship. Since the French are not, to any great extent, an emigrating people, this means in practice that the great bulk of the preferable settlers are those who speak the English language—those coming from the United Kingdom or the United States. Next in order of readiness of assimilation are the Scandinavians, Dutch, and Germans, who readily learn English and are already acquainted with the working of democratic institutions. Settlers from Southern and Eastern Europe, however desirable from a purely economic point of view, are less readily assimilated, and the Canadianizing of the people who have come to Canada from these regions in the present century is a problem both in the agricultural Prairie Provinces and in the cities of the East. Less assimilable still, are those who come to Canada from the Orient. On the whole, the great bulk of Canadian immigration of the past generation has been drawn from the English-speaking countries and from those continental European countries where the population is ethnically closely related to the British, though for some years there was an increasing immigration of Slavs.

The racial origins of the immigrants who arrived in Canada in the calendar years 1926-36 are shown in Table 5. In the latest year the British races contributed 44 p.c. of the immigrants and the French 7 p.c.

5.—Racial Origins of Immigrants into Canada, calendar years 1926-36.

NOTE.—Dashes in this table indicate that no immigrants were reported under the corresponding stub items.

Racial Origin.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
British—											
English.....	30,593	34,056	37,662	43,287	24,789	9,417	6,461	4,301	3,491	3,089	3,049
Irish.....	11,425	11,857	12,523	14,478	7,876	2,748	1,886	1,316	1,021	895	854
Scottish.....	16,339	17,569	18,532	23,207	11,996	3,825	2,612	1,700	1,198	1,204	1,133
Welsh.....	1,568	2,204	3,316	3,586	1,116	371	184	126	115	88	105
Totals, British.....	59,925	65,686	72,033	84,558	45,777	16,361	11,143	7,443	5,825	5,276	5,141
Continental European—											
Albanian.....	11	38	38	22	33	5	—	—	4	1	4
Belgian.....	1,922	2,448	1,341	952	427	97	81	50	78	100	94
Bohemian.....	112	80	90	104	76	22	24	12	10	7	13
Bulgarian.....	88	243	267	311	353	17	16	15	5	13	23
Croatian.....	1,138	963	1,108	751	604	118	95	107	152	158	232
Czech.....	778	726	987	440	261	78	77	54	76	113	124
Dalmatian.....	—	—	1	7	—	—	—	—	—	—	1
Dutch.....	2,204	2,631	2,255	1,980	1,605	308	247	190	150	172	211
Estonian.....	77	111	108	98	87	9	1	3	2	3	5
Finnish.....	4,811	5,167	3,758	4,712	2,811	136	62	67	79	64	61
French.....	2,882	3,834	4,605	5,187	5,084	2,938	2,832	1,337	903	840	833
German.....	13,791	15,845	17,964	17,919	13,544	2,389	1,842	1,213	945	725	792
Greek.....	319	610	770	741	575	66	71	53	58	67	92
Herzegovinian.....	3	4	—	—	—	—	—	—	—	—	—
Italian.....	2,683	4,617	1,114	1,514	1,327	633	435	365	375	392	349
Jewish.....	4,867	5,184	4,059	4,001	4,220	670	747	781	869	803	659
Lettish.....	58	81	78	83	36	2	8	3	1	2	5
Lithuanian.....	792	893	1,799	959	624	65	49	44	45	25	51
Magyar.....	5,262	5,875	6,366	5,484	3,360	530	333	506	442	344	334
Maltese.....	35	38	26	41	22	5	6	—	—	—	4
Mexican.....	3	1	—	—	—	1	—	—	—	1	6
Montenegrin.....	1	4	—	2	3	—	—	—	—	—	—
Moravian.....	22	50	7	21	5	1	3	—	—	—	—
Polish.....	5,552	8,481	8,583	6,424	5,207	680	474	410	436	447	414
Portuguese.....	21	7	22	28	11	5	9	5	5	5	4
Roumanian.....	358	248	336	400	300	48	38	38	44	43	61
Russian.....	1,261	1,280	1,245	858	1,123	111	104	82	70	99	94
Ruthenian.....	9,534	10,899	16,080	11,009	8,133	541	482	390	578	483	815
Scandinavian—											
Danish.....	1,696	4,032	4,092	3,140	1,421	175	116	82	63	54	63
Icelandic.....	57	50	49	35	40	10	12	10	12	11	4
Norwegian.....	3,820	6,415	3,707	3,750	1,808	262	275	144	132	122	101
Swedish.....	3,011	3,866	4,284	3,895	1,440	276	225	126	100	113	81

5.—Racial Origins of Immigrants into Canada, calendar years 1926-36—concluded.

Racial Origin.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Continental European—con.											
Serbian.....	854	586	416	387	208	50	51	35	38	28	40
Slovak.....	4,024	4,256	4,466	2,617	2,645	344	262	408	594	415	571
Spanish.....	49	45	62	62	36	26	23	12	15	12	22
Spanish American.....	6	2	6	5	2	1	2	4	—	—	—
Swiss.....	588	818	621	652	340	72	57	46	43	55	60
Turkish.....	6	9	7	7	8	2	—	2	1	—	1
Yugoslavic.....	2,205	1,640	2,915	973	521	78	59	68	104	119	109
Totals, Continental European.....	74,901	92,077	93,632	79,571	58,300	10,771	9,118	6,662	6,429	5,836	6,333
Non-European—											
American Indian.....	13	26	21	25	8	29	24	10	6	2	2
Arabian.....	8	8	1	4	7	1	2	—	1	2	—
Armenian.....	79	66	20	33	28	6	5	10	3	5	6
Chinese.....	—	2	1	1	—	—	1	1	1	—	—
East Indian.....	70	56	56	49	80	52	61	36	33	26	13
Japanese.....	443	511	535	180	218	174	119	106	126	70	103
Korean.....	1	—	—	—	—	—	—	—	—	—	—
Negro.....	302	313	359	464	294	104	71	80	25	28	18
Persian.....	4	6	1	1	1	1	1	—	—	—	1
Syrian.....	236	135	124	107	93	31	46	34	27	32	26
Totals, Non-European.....	1,156	1,123	1,118	864	729	398	330	277	222	165	169
Grand Totals.....	135,982	158,886	166,783	164,993	104,806	27,530	20,591	14,382	12,476	11,277	11,643

Languages of Immigrants.—The languages of immigrants 10 years old or over, arriving *via* ocean ports and from the United States, are shown for the calendar years 1931-36, in Table 6. English-speaking immigrants constituted 58 p.c. of the total in 1936, and French-speaking immigrants 5 p.c.

6.—Languages of Immigrants, Ten Years of Age or Over, calendar years 1931-36.

NOTE.—See headnote to Table 5.

Language.	1931.	1932.	1933.	1934.	1935.	1936.
English.....	15,869	11,037	7,524	6,059	5,367	5,397
French.....	1,028	992	562	467	507	485
German.....	624	506	378	370	274	282
Norwegian.....	68	74	34	33	29	36
Swedish.....	72	65	21	23	18	15
Danish.....	56	45	44	19	21	19
Icelandic.....	—	6	5	4	2	—
Flemish.....	36	36	23	45	53	43
Dutch.....	39	33	21	36	26	53
Finnish.....	71	34	36	44	37	36
Estonian.....	5	3	1	1	3	3
Lettish.....	3	2	4	—	—	3
Lithuanian.....	36	30	29	24	22	38
Russian.....	51	36	50	54	32	36
Hebrew ¹	266	215	223	137	158	197
Ruthenian.....	211	164	149	205	184	266
Russniak.....						
Ukrainian.....						
Polish.....	421	390	505	688	707	793
Roumanian.....	39	32	29	45	64	65
Slovenian.....	10	—	3	—	—	3
Czech (Bohemian).....	224	192	269	433	356	490
Croatian (Serbian).....	111	120	114	189	214	305
Hungarian (Magyar).....	300	211	314	290	234	265
Italian.....	420	273	227	261	265	245
Spanish.....	14	24	19	6	7	9
Portuguese.....	—	1	1	—	—	—
Greek.....	52	49	42	42	44	56
Albanian.....	4	—	—	1	1	3
Turkish.....	1	—	—	—	—	4
Bulgarian.....	17	11	10	6	10	13
Chinese.....	—	1	1	1	—	—
Japanese.....	161	112	104	117	66	96
East Indian.....	48	48	30	29	21	10
Armenian (Aramaic).....	4	10	3	1	1	5
Syrian (Arabic).....	15	20	16	10	13	15
Totals.....	20,276	14,772	10,791	9,640	8,736	9,286

¹ Includes those speaking Yiddish.

Nationalities of Immigrants.—In the calendar year 1936 the percentage of British subjects immigrating to Canada was 27, while that of United States citizens was 35. In 1930, when total immigration was over eight times that of the latest year, the proportions were 34 p.c. and 21 p.c., respectively. The third largest group, comprising immigrants of Polish nationality, dropped from 16 p.c. in 1930 to 13 p.c. in 1936. Table 7 shows the nationalities of immigrants for the six latest years.

7.—Nationalities of Immigrants, calendar years 1931-36.

NOTE.—See headnote to Table 5.

Nationality.	1931.	1932.	1933.	1934.	1935.	1936.
Albanian.....	4	—	1	1	1	4
Arabian.....	1	—	1	—	8	—
Argentinian.....	3	1	5	1	—	—
Armenian.....	—	1	1	—	—	—
Austrian.....	67	45	46	30	29	40
Belgian.....	56	46	34	62	79	93
Brazilian.....	2	1	2	1	5	—
British.....	9,794	15,163	3,630	3,151	3,052	3,171
Bulgarian.....	11	9	9	6	13	15
Chilean.....	—	1	—	1	—	—
Chinese.....	—	1	1	1	—	—
Colombian.....	—	6	—	—	—	—
Costa Rican.....	—	1	1	—	—	—
Cuban.....	2	1	5	1	—	7
Czechoslovakian.....	544	450	581	857	647	771
Danish.....	78	52	50	24	24	18
Danziger.....	2	—	—	1	—	—
Dominican.....	—	—	1	—	—	—
Dutch.....	36	32	29	42	31	60
Ecuadorian.....	—	2	—	—	—	1
Estonian.....	10	3	—	1	3	5
Finnish.....	111	42	45	62	39	49
French.....	77	75	55	58	69	96
German.....	408	312	185	119	98	72
Greek.....	29	36	26	39	42	77
Guatemalan.....	1	—	—	—	—	—
Haitian.....	—	1	—	—	—	—
Honduran.....	—	—	—	—	1	—
Hungarian.....	436	274	418	378	250	247
Icelandic.....	2	5	5	3	6	37
Italian.....	466	269	241	295	277	281
Japanese.....	112	98	98	110	56	78
Korean.....	—	—	1	—	—	—
Latvian.....	6	7	10	1	10	2
Lithuanian.....	90	79	51	50	25	73
Luxemburger.....	—	—	—	—	2	—
Mexican.....	3	—	4	4	42	49
Norwegian.....	67	65	35	30	25	—
Panamanian.....	2	1	3	1	—	1
Paraguayan.....	—	—	1	—	—	—
Persian.....	—	1	5	—	—	—
Peruvian.....	3	2	—	—	—	—
Polish.....	1,244	1,070	1,042	1,337	1,336	1,552
Roumanian.....	230	153	173	183	215	168
Russian.....	52	50	78	48	23	30
South American.....	—	—	1	—	—	—
Spanish.....	5	1	—	3	5	10
Swedish.....	55	40	22	15	27	11
Swiss.....	50	30	31	29	40	65
Syrian.....	12	21	12	14	14	12
Turkish.....	3	1	4	—	1	3
Ukrainian.....	3	5	3	—	—	—
United States.....	13,154	1,901	7,194	5,225	4,474	4,122
Uruguayan.....	—	1	1	—	—	—
Venezuelan.....	—	2	—	—	1	—
West Indian (not British).....	1	—	—	—	1	—
Yugoslavic.....	298	234	241	292	305	423
Totals.....	27,530	20,591	14,332	12,476	11,277	11,643

Countries of Birth of Immigrants.—In Table 8 will be found the countries of birth of the immigrants into Canada in the calendar years 1931-36. The figures show that the United States with 3,591 was the birthplace of more of our 1936 immigrants than any other single country. This has been the case since 1930. In 1936 Poland came second with 1,599, England third with 1,289, and Czechoslovakia fourth with 760.

8.—Countries of Birth of Immigrants, calendar years 1931-36.

NOTE.—See headnote to Table 5.

Country of Birth.	1931.	1932.	1933.	1934.	1935.	1936.
Africa (British).....	54	37	30	19	21	23
Africa (not British).....	9	5	3	5	14	1
Albania.....	5	—	1	2	1	4
Argentina.....	10	3	11	3	4	2
Armenia.....	1	1	—	—	—	—
Asia.....	10	3	6	6	21	9
Australia.....	93	56	36	40	27	24
Austria.....	99	75	53	54	47	47
Belgium.....	82	67	45	71	97	101
Brazil.....	16	6	6	3	14	3
Bulgaria.....	11	9	14	5	12	18
Canada.....	1,105	1,139	779	580	543	553
Central America.....	9	3	2	—	2	4
Chile.....	4	2	1	3	—	1
China.....	30	29	23	26	29	29
Czechoslovakia.....	539	448	591	855	646	760
Danzig.....	1	2	—	7	—	—
Denmark.....	84	60	58	30	33	27
East Indies.....	—	—	—	—	—	—
England.....	4,938	2,802	1,720	1,405	1,320	1,289
Estonia.....	10	4	1	2	5	3
Finland.....	118	50	56	68	49	52
France.....	101	102	69	64	78	100
Germany.....	447	348	213	147	122	114
Greece.....	58	60	40	47	59	83
Guiana (British).....	10	6	5	6	6	7
Holland.....	41	41	32	36	32	73
Hungary.....	456	282	429	387	260	262
Iceland.....	2	8	6	5	7	1
India (British).....	134	107	81	63	61	42
Ireland (Free State).....	363	193	144	135	120	127
Ireland (Northern).....	647	269	181	203	147	130
Italy.....	516	331	290	338	346	314
Japan.....	183	125	113	129	75	104
Korea.....	—	2	2	6	4	2
Latvia.....	9	17	12	6	10	6
Lesser British Isles.....	37	18	17	5	4	8
Lithuania.....	89	88	50	54	29	72
Malta.....	6	3	—	—	3	—
Mexico.....	7	14	11	7	53	76
Newfoundland.....	416	310	287	308	325	393
New Zealand.....	36	20	20	13	17	12
Norway.....	101	94	47	39	44	46
Persia.....	2	—	—	—	1	1
Poland.....	1,307	1,134	1,075	1,369	1,351	1,599
Portugal.....	2	1	1	4	—	—
Roumania.....	246	162	184	186	211	171
Russia.....	191	153	166	119	78	78
St. Pierre and Miquelon.....	4	1	1	9	6	12
Scotland.....	2,391	1,182	778	538	547	569
South America.....	10	20	8	6	12	5
Spain.....	8	2	2	5	1	8
Sweden.....	97	63	37	28	42	22
Switzerland.....	55	32	41	28	48	67
Syria.....	23	26	21	20	18	23
Turkey.....	12	8	13	5	7	16
Ukraine.....	3	4	3	—	—	3
United States.....	11,582	10,140	6,180	4,519	3,859	3,591
Wales.....	294	106	80	78	46	64
West Indies (British).....	63	51	37	48	31	27
West Indies (not British).....	16	4	7	2	8	6
Yugoslavia.....	306	244	251	299	313	446
Other European countries.....	2	—	—	2	—	—
Other countries (British).....	16	9	5	15	3	6
Other countries (not British).....	11	9	6	13	6	3
Born at sea.....	2	1	1	1	—	4
Totals.....	27,530	20,591	14,382	12,476	11,277	11,643

Ports of Arrival of Immigrants.—Throughout the greater part of our history, Quebec has been the port at which the greatest number of our immigrants have landed. Of recent years there has been a tendency for a larger percentage of immigrants to arrive at the port of Halifax. This would appear to have been due to increasing immigration in the early spring months before the St. Lawrence is open for traffic. Figures for recent years are given in Table 9.

9.—Immigrants Arriving in Canada, by Chief Ports of Arrival, calendar years 1931-36.

Port.	1931.	1932.	1933.	1934.	1935.	1936.
Quebec.....	6,940	3,558	3,063	2,889	2,901	3,478
Saint John.....	1,162	46	30	25	20	21
Halifax.....	2,389	1,950	1,446	1,965	1,494	1,654
North Sydney.....	300	219	223	260	247	324
Sydney.....	18	3	2	1	7	4
Montreal.....	131	69	58	64	54	55
Vancouver.....	367	294	223	274	187	200
Victoria.....	135	84	56	53	51	44
New York.....	854	632	738	850	943	878
Boston.....	2	Nil	9	1	10	5
Charlottetown.....	Nil	Nil	Nil	1	Nil	Nil
Other ports.....	37	27	34	22	72	104
From the United States.....	15,195	13,709	8,500	6,071	5,291	4,876
Totals.....	27,530	20,591	14,382	12,476	11,277	11,643

Destinations of Immigrants.—Table 10 shows that in the nine latest calendar years the province of Ontario continued to receive the largest number of immigrants, as has been the case since 1905. In 1929 and 1930 Manitoba was in second place, while in the seven latest years Quebec stood second as the immediate destination of new arrivals. The 1934-35 edition of the Year Book gives similar information, by fiscal years, from 1901 to 1934.

10.—Destinations of Immigrants into Canada, by Provinces, calendar years 1929-37.

Calendar Year.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon.	Not Shown.	Total.
1929.....	4,961	23,952	61,684	38,340	11,336	15,300	9,417	1	164,993 ¹
1930.....	4,060	18,405	37,851	23,837	6,435	7,812	6,395	2	104,806 ¹
1931.....	2,547	5,452	12,316	1,056	1,352	2,213	2,583	Nil	27,530 ¹
1932.....	1,762	4,134	9,312	757	971	1,692	1,960	Nil	20,591 ¹
1933.....	1,281	2,755	6,210	558	727	1,296	1,552	1	14,382 ¹
1934.....	1,027	2,456	5,582	390	519	1,098	1,402	Nil	12,476 ¹
1935.....	1,060	2,258	4,786	708	408	735	1,315	Nil	11,277 ¹
1936.....	981	1,995	4,913	938	528	917	1,366	Nil	11,643 ¹
1937.....	1,136	2,611	6,463	1,430	616	1,175	1,667	Nil	15,101 ¹

¹ Includes immigrants destined for the Northwest Territories: 2 in 1929, 9 in 1930, 11 in 1931, 3 in 1932, 2 in 1933, 2 in 1934, 7 in 1935, 5 in 1936, and 3 in 1937.

Occupations of Immigrant Arrivals.—The immigrants most universally acceptable to Canadians are those who settle on the land or those females who enter domestic service. In Table 11 will be found statistics of the occupations and destinations of immigrants arriving in Canada during the calendar year 1936.

11.—Immigrants Arriving in Canada, Classified by Occupation and Sex, According to Destination, calendar year 1936.

NOTE.—See headnote to Table 5.

Destination.	Total.	Farming Class.				Labouring Class.				Mechanics.			
		18 Yrs. or Over.		Under 18 Yrs.		18 Yrs. or Over.		Under 18 Yrs.		18 Yrs. or Over.		Under 18 Yrs.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Prince Edward Island.....	63	7	6	8	4	-	-	-	-	-	-	-	-
Via ocean ports.....	7	-	1	-	-	-	-	-	-	-	-	-	-
From the United States.....	56	7	5	8	4	-	-	-	-	-	-	-	-
Nova Scotia.....	668	45	20	17	11	49	4	4	4	13	2	-	-
Via ocean ports.....	370	17	7	6	2	42	4	-	1	9	1	-	-
From the United States.....	298	28	13	11	9	7	2	-	3	4	1	-	-
New Brunswick.....	250	21	9	3	5	7	-	1	1	5	1	-	-
Via ocean ports.....	43	4	1	-	-	1	-	-	1	1	-	-	-
From the United States.....	207	17	8	3	5	6	-	-	-	1	-	-	-
Quebec.....	1,995	61	26	23	16	81	14	17	6	106	36	16	13
Via ocean ports.....	1,053	30	14	14	7	42	4	6	2	58	22	12	7
From the United States.....	31	12	9	9	9	39	10	11	4	48	14	4	6
Ontario.....	4,913	219	129	113	65	65	18	13	7	225	94	30	31
Via ocean ports.....	2,803	153	96	95	58	30	7	7	4	96	32	9	11
From the United States.....	2,110	66	33	18	7	35	11	6	3	129	62	21	20
Manitoba.....	793	162	128	135	121	10	5	4	-	6	5	1	2
Via ocean ports.....	145	14	6	4	116	3	-	3	-	2	2	1	-
From the United States.....	648	72	34	26	27	7	5	1	2	4	3	1	4
Saskatchewan.....	344	36	21	20	22	1	2	-	2	-	3	-	-
Via ocean ports.....	184	36	13	6	5	-	1	-	-	2	-	-	-
From the United States.....	197	137	81	72	53	7	2	1	-	9	2	1	4
Alberta.....	583	71	45	49	32	1	1	1	-	3	-	-	-
Via ocean ports.....	334	66	36	23	21	6	2	-	-	6	2	1	1
From the United States.....	1,362	93	45	30	15	35	8	3	2	42	22	7	5
British Columbia.....	766	49	18	16	3	19	6	3	1	20	7	2	2
Via ocean ports.....	596	44	27	14	12	16	2	-	1	22	15	5	3
From the United States.....	4	1	-	-	-	-	-	-	-	-	-	-	-
Yukon.....	4	-	-	-	-	-	-	-	-	-	-	-	-
Via ocean ports.....	4	1	-	-	-	-	-	-	-	-	-	-	-
From the United States.....	5	-	-	-	-	-	-	-	-	-	-	-	-
Northwest Territories.....	-	-	-	-	-	-	-	-	-	-	-	-	-
Via ocean ports.....	-	-	-	-	-	-	-	-	-	-	-	-	-
From the United States.....	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals.....	11,693	818	478	427	317	255	54	43	22	408	165	57	56
Via Ocean Ports.....	6,767	508	325	331	240	138	21	20	10	189	65	24	20
From the United States.....	4,876	310	153	96	77	117	33	23	12	219	100	33	36

11.—Immigrants Arriving in Canada, Classified by Occupation and Sex, According to Destination, calendar year 1936—concluded.

Destination.	Trading and Clerical Classes.				Mining Class.				Female Domestic.		Other Classes.				
	Under 18 Yrs.				18 Yrs. or Over.				18 Years or Over.		18 Yrs. or Over.		Under 18 Yrs.		
	M.	F.	M.	F.	M.	F.	M.	F.	F.	F.	M.	F.	M.	F.	
Prince Edward Island.....	-	-	-	-	-	-	-	-	4	1	-	2	16	8	8
Via ocean ports.....	-	-	-	-	-	-	-	-	1	3	-	2	15	2	6
From the United States.....	-	-	-	-	-	-	-	-	2	2	-	2	135	69	71
Nova Scotia.....	20	11	1	1	1	1	1	1	127	31	31	31	51	21	26
Via ocean ports.....	11	6	-	-	-	-	-	-	123	31	31	12	51	21	26
From the United States.....	9	5	1	1	-	-	-	-	11	4	-	19	84	48	45
New Brunswick.....	7	5	1	1	-	-	-	-	11	4	-	10	72	45	44
Via ocean ports.....	2	1	-	-	-	-	-	-	7	7	-	3	12	4	4
From the United States.....	5	4	-	-	-	-	-	-	4	4	-	7	60	41	40
Quebec.....	138	46	24	19	-	-	-	-	100	8	8	147	643	215	238
Via ocean ports.....	85	19	12	11	-	-	-	-	85	7	7	68	301	115	132
From the United States.....	53	27	12	8	2	2	2	2	15	1	1	79	342	100	106
Ontario.....	257	121	43	33	-	-	-	-	182	22	22	265	1,506	753	692
Via ocean ports.....	63	25	6	6	9	3	3	3	165	22	22	95	854	493	460
From the United States.....	194	96	37	27	11	3	3	3	17	5	5	170	652	260	232
Manitoba.....	15	8	1	2	-	-	-	-	12	12	12	32	147	72	63
Via ocean ports.....	8	1	1	-	-	-	-	-	12	5	5	19	107	57	55
From the United States.....	7	8	-	-	-	-	-	-	6	1	1	13	40	15	8
Saskatchewan.....	13	1	3	2	-	-	-	-	5	-	-	20	152	66	73
Via ocean ports.....	-	-	-	-	-	-	-	-	5	1	1	20	95	57	62
From the United States.....	13	7	3	2	-	-	-	-	1	-	-	9	57	9	11
Alberta.....	21	9	9	6	-	-	-	-	25	6	6	30	249	90	105
Via ocean ports.....	10	5	7	3	-	-	-	-	21	6	6	14	166	72	78
From the United States.....	11	4	2	3	-	-	-	-	21	6	6	14	166	72	78
British Columbia.....	11	4	2	3	-	-	-	-	21	6	6	14	166	72	78
Via ocean ports.....	51	28	6	4	5	1	1	1	32	3	3	108	486	191	160
From the United States.....	12	12	-	-	3	1	1	1	32	3	3	52	274	130	110
Yukon.....	39	16	6	4	2	1	1	1	9	-	-	56	192	61	50
Via ocean ports.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
From the United States.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northwest Territories.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Via ocean ports.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
From the United States.....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals.....	522	237	88	68	31	10	499	76	499	76	76	657	3,387	1,509	1,455
Via Ocean Ports.....	191	70	26	21	14	6	442	75	442	75	75	286	1,862	951	925
From the United States.....	331	167	62	47	17	4	57	1	57	1	1	371	1,525	558	527

Prohibited Immigrants.—The following is quoted from Section 3 of the Immigration Act.

PROHIBITED CLASSES.

"No immigrant, passenger or other person, unless he is a Canadian citizen, or has Canadian domicile, shall be permitted to enter or land in Canada, or in case of having landed in or entered Canada shall be permitted to remain therein, who belongs to any of the following classes, hereinafter called 'prohibited classes':—

- (a) Idiots, imbeciles, feeble-minded persons, epileptics, insane persons, and persons who have been insane at any time previously;
- (b) Persons afflicted with tuberculosis in any form, or with any loathsome disease, or with a disease which is contagious or infectious, or which may become dangerous to the public health, whether such persons intend to settle in Canada or only to pass through Canada in transit to some other country: Provided that if such disease is one which is curable within a reasonably short time, such persons may, subject to the regulations in that behalf, if any, be permitted to remain on board ship if hospital facilities do not exist on shore, or to leave ship for medical treatment;
- (c) Immigrants who are dumb, blind, or otherwise physically defective, unless, in the opinion of a Board of Inquiry or officer acting as such, they have sufficient money, or have such profession, occupation, trade, employment or other legitimate mode of earning a living that they are not liable to become a public charge or unless they belong to a family accompanying them or already in Canada and which gives security satisfactory to the Minister against such immigrants becoming a public charge;
- (d) Persons who have been convicted of, or admit having committed, any crime involving moral turpitude;
- (e) Prostitutes and women and girls coming to Canada for any immoral purpose and pimps or persons living on the avails of prostitution;
- (f) Persons who procure or attempt to bring into Canada prostitutes or women or girls for the purpose of prostitution or other immoral purpose;
- (g) Professional beggars or vagrants;
- (h) Immigrants to whom money has been given or loaned by any charitable organization for the purpose of enabling them to qualify for landing in Canada under this Act, or whose passage to Canada has been paid wholly or in part by any charitable organization, or out of public moneys, unless it is shown that the authority in writing of the Deputy Minister, or in case of persons coming from Europe, the authority in writing of the Assistant Superintendent of Immigration for Canada, in London, has been obtained for the landing in Canada of such persons, and that such authority has been acted upon within a period of sixty days thereafter;
- (i) Persons who do not fulfil, meet or comply with the conditions and requirements of any regulations which for the time being are in force and applicable to such persons under this Act;
- (j) Persons who in the opinion of the Board of Inquiry or the officer in charge at any port of entry are likely to become a public charge;
- (k) Persons of constitutional psychopathic inferiority;
- (l) Persons with chronic alcoholism;
- (m) Persons not included within any of the foregoing prohibited classes, who upon examination by a medical officer are certified as being mentally or physically defective to such a degree as to affect their ability to earn a living;
- (n) Persons who believe in or advocate the overthrow by force or violence of the Government of Canada or of constituted law and authority, or who disbelieve in or are opposed to organized government, or who advocate the assassination of public officials, or who advocate or teach the unlawful destruction of property;
- (o) Persons who are members of or affiliated with any organization entertaining or teaching disbelief in or opposition to organized government, or advocating or teaching the duty, necessity, or propriety of the unlawful assaulting or killing of any officer or officers, either of specific individuals or of officers generally of the Government of Canada or of any other organized government, because of his or their official character, or advocating or teaching the unlawful destruction of property;
- (q) Persons guilty of espionage with respect to His Majesty or any of His Majesty's allies;
- (r) Persons who have been found guilty of high treason or treason or of conspiring against His Majesty, or of assisting His Majesty's enemies in time of war, or of any similar offence against any of His Majesty's allies;
- (s) Persons who at any time within a period of ten years from the first day of August, one thousand nine hundred and fourteen, were deported from any part of His Majesty's dominions or from any allied country on account of treason or of conspiring against His Majesty, or of any similar offence in connection with the war against any of the allies of His Majesty;
- (t) On and after the first day of July, one thousand nine hundred and nineteen, in addition to the foregoing 'prohibited classes', the following persons shall also be prohibited from entering or landing in Canada: Persons over fifteen years of age, physically capable of reading, who cannot read the English or French language or some other language or dialect: Provided that any admissible person or any person heretofore or hereafter legally admitted, or any citizen of Canada, may bring in or send for his father or grandfather, over fifty-five years of age, his wife, his mother, his grandmother or his unmarried or widowed daughter, if otherwise admissible, whether such relative can read or not, and such relative shall be permitted to enter; for the purpose of ascertaining whether aliens can read, the immigration officer shall use slips of uniform size prepared by direction of the Minister, each containing not less than thirty and not more than forty words in ordinary use printed in plainly legible type in the language or dialect the person may designate as the one in which he desires the examination to be made, and he shall be required to read the words printed on the slip in such language or dialect; but the provisions of this subsection shall not apply to Canadian citizens and persons who have Canadian domicile, to persons in transit through Canada, or to such persons or classes of persons as may from time to time be approved by the Minister;
- (u) Members of a family (including children over as well as under 18 years of age) accompanying a person who has been rejected, unless in the opinion of the Board of Inquiry no hardship would be involved by separation of the family."

The Immigration Act provides for the rejection and deportation of immigrants belonging to the prohibited classes, and also for the deportation of those who become undesirables within five years after legal entry.

Table 12 shows the number of immigrants rejected upon their arrival at Canadian ports, by causes and nationalities, for the calendar years 1931-36, while Table 13 shows the number of deportations after admission, for the fiscal years 1903-25 and by single years for the fiscal years 1926-37, also by causes and nationalities.

12.—Rejections of Immigrants upon Arrival at Ocean Ports, by Principal Causes and by Nationalities, calendar years 1931-36.

Item.	1931.	1932.	1933.	1934.	1935.	1936.	Total, 1931- 36.
By Causes—							
Medical causes.....	23	17	14	13	13	10	90
Civil causes.....	286	244	160	224	192	213	1,319
Totals.....	309	261	174	237	205	223	1,409
By Nationalities—							
British.....	171	144	101	167	133	128	844
United States.....	5	13	9	14	6	9	56
Other.....	133	104	64	56	66	86	509

13.—Deportations of Immigrants after Admission, by Principal Causes and by Nationalities, fiscal years ended 1926-37, with Totals 1903-25 and 1903-37.

Item.	Total, 1903- 25.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	Total, 1903- 37.
By Causes—														
Medical causes.....	5,578	410	470	519	650	600	789	697	476	301	144	81	47	10,762
Public charges.....	8,638	506	354	430	444	2,106	2,245	4,507	4,916	2,991	464	125	110	27,886
Criminality.....	6,103	453	447	426	441	591	868	1,006	836	493	267	207	117	12,255
Other civil causes.....	1,474	189	149	257	194	107	200	270	277	250	172	163	240	3,942
Accompanying de- ported persons....	630	158	165	254	235	559	274	545	626	439	81	34	57	4,057
Totals.....	22,473	1,716	1,585	1,886	1,964	3,963	4,376	7,025	7,131	4,474	1,128	610	571	58,902
By Nationalities—														
British.....	11,946	899	808	1,047	1,083	2,983	3,099	4,248	4,251	2,718	385	157	202	33,826
United States.....	6,370	330	351	297	294	228	279	260	331	319	199	146	167	9,571
Other.....	4,157	487	426	542	587	752	998	2,517	2,549	1,437	544	307	202	15,505

Juvenile Immigrants.—Among the most generally acceptable immigrants of recent years were the juveniles of both sexes, many of whom had been trained by highly accredited British organizations for Canadian life before coming to Canada, the boys being taught the lighter branches of farm work, and the girls instructed in domestic occupations. On arrival in Canada the boys were placed on farms, while the girls were placed either in town or country, but the organizations remained the guardians of the children until they had reached maturity, and, in addition, the children were subject to efficient and recurrent government inspection until each reached the age of nineteen. This inspection was under the control of the Supervisor of Juvenile Immigration.

Under the British Empire Settlement Agreement the term "children" was applied to boys from 14 to 19 years of age and girls from 14 to 17 migrating to Canada under provincial or approved-society auspices. These organizations were assisted by the Oversea Settlement Agreement, which provided free transportation for the boys and girls from the British Isles migrating to Canada under their auspices. On Sept. 23, 1931, the societies concerned were notified that the Dominion Government had decided to discontinue any further assistance of that nature.

The number of such juvenile immigrants to Canada in each year since 1901 is given in Table 14.

14.—British Juvenile Immigrants, fiscal years ended 1901-37.

NOTE.—Juvenile immigrants are, of course, included in the total number of immigrants, recorded elsewhere.

Fiscal Year.	Juvenile Immigrants.	Fiscal Year.	Juvenile Immigrants.	Fiscal Year.	Juvenile Immigrants.
1901.....	977	1914.....	2,318	1927.....	1,741
1902.....	1,540	1915.....	1,899	1928.....	2,070
1903.....	1,979	1916.....	821	1929.....	3,036
1904.....	2,212	1917.....	251	1930.....	4,281
1905.....	2,814	1918.....	Nil	1931.....	2,190
1906.....	3,258	1919.....	Nil	1932.....	478
1907 (9 months).....	1,455	1920.....	155	1933.....	172
1908.....	2,375	1921.....	1,426	1934.....	6
1909.....	2,424	1922.....	1,211	1935.....	6 ¹
1910.....	2,422	1923.....	1,184	1936.....	4 ¹
1911.....	2,524	1924.....	2,080	1937.....	10
1912.....	2,689	1925.....	2,000		
1913.....	2,642	1926.....	1,862		

¹ Revised since the publication of the 1937 Year Book.

Oriental Immigration.—The immigration to Canada of Orientals is fundamentally an economic rather than a racial problem, affecting most of all those parts of the country which are nearest to the Orient and the classes which feel their economic position threatened. A record of Oriental immigration, by fiscal years, since the commencement of the century is given in Table 15, while Table 15A gives the same information for the calendar years for which it has been possible to compile the figures, *viz.*, 1929 to 1936.

15.—Record of Oriental Immigrants, fiscal years ended 1901-37.

Fiscal Year.	Chinese.	Japanese.	East Indians.	Total.	Fiscal Year.	Chinese.	Japanese.	East Indians.	Total.
1901.....	2,544	6	Nil	2,550	1920.....	544	711	Nil	1,255
1902.....	3,587	Nil	Nil	3,587	1921.....	2,435	532	10	2,977
1903.....	5,329	Nil	Nil	5,329	1922.....	1,746	471	13	2,230
1904.....	4,847	Nil	Nil	4,847	1923.....	711	369	21	1,101
1905.....	77	354	45	476	1924.....	674	448	40	1,162
1906.....	168	1,922	387	2,477	1925.....	Nil	501	46	547
1907 (9 months).....	291	2,042	2,124	4,457	1926.....	Nil	421	62	483
1908.....	2,234	7,601	2,623	12,458	1927.....	Nil	475	60	535
1909.....	2,106	495	6	2,607	1928.....	3	478	56	537
1910.....	2,302	271	10	2,583	1929.....	1	445	52	498
1911.....	5,320	437	5	5,762	1930.....	Nil	194	58	252
1912.....	6,581	765	3	7,349	1931.....	Nil	205	80	285
1913.....	7,445	724	5	8,174	1932.....	Nil	195	47	242
1914.....	5,512	856	88	6,456	1933.....	1	115	63	179
1915.....	1,258	592	Nil	1,850	1934.....	2	105	33	140
1916.....	89	401	1	491	1935.....	Nil	93	33	126
1917.....	393	648	Nil	1,041	1936.....	Nil	83	21	104
1918.....	769	883	Nil	1,652	1937.....	1	103	13	117
1919.....	4,333	1,178	Nil	5,511					
Totals.....						61,303	25,119	6,005	92,427

15A.—Record of Oriental Immigrants, calendar years 1929-36.

Calendar Year.	Chinese.	Japanese.	East Indians.	Total.
1929.....	1	180	49	230
1930.....	Nil	218	80	298
1931.....	Nil	174	52	226
1932.....	1	119	61	181
1933.....	1	106	36	143
1934.....	1	126	33	160
1935.....	Nil	70	26	96
1936.....	Nil	103	13	116

Chinese Immigrants.—Oriental immigration to the Pacific Coast of North America appears to have commenced with the coming of Chinese immigrants about the time of the discovery of gold in California in 1849, and British Columbia is thought to have received its first Chinese immigrants some time before 1870. The original occupations of these immigrants were laundry workers and domestic servants. As early as 1872 Chinese were employed in the coal mines of the province and the Legislature was already considering the imposition of a poll tax on Chinese, the same proposition coming up later in the Dominion Parliament with the design of preventing the employment of Chinese labour in railway construction. A Royal Commission was appointed by the Dominion Government in 1884 to investigate Chinese immigration and this commission recommended the imposition of a head tax of \$10 upon Chinese entering Canada, together with registration and special legislation regulating the entry of Chinese domestic servants. This led to the passage of legislation in 1885 (48-49 Vict., c. 71), providing that thereafter Chinese of the labouring class should be required, as a condition of entering Canada, to pay a head tax of \$50 each. On Jan. 1, 1901 (63-64 Vict., c. 32), this tax was increased to \$100, and on Jan. 1, 1904 (3 Edw. VII, c. 8), after another Royal Commission had reported on this matter, the head tax was further increased to \$500. This tax was paid by all Chinese immigrants except consular officers, merchants, and clergymen and their families, tourists, men of science, students and teachers. In spite of this restrictive legislation, the number of Chinese enumerated at the decennial censuses rose from 4,383 in 1881 to 17,312 in 1901, to 27,774 in 1911, to 39,587 in 1921, and 46,519 in 1931. Of this latter number, 43,051 were males and only 3,468 females. Over 58 p.c. of all the Chinese in Canada, *viz.*, 27,139 were residents of British Columbia.

16.—Record of Revenue Receipts and Registrations for Leave of Chinese Immigrants, fiscal years ended Mar. 31, 1912-37, with Totals 1886-1900 and 1901-11.

Fiscal Year.	Paying Tax.	Exempt from Tax.	Percentage of Total Arrivals Admitted, Exempt from Tax.	Registrations for Leave.	Total Revenue.
	No.	No.	p.c.	No.	\$
Totals (1886 to 1900, inclusive).....	28,637	394	1.36	15,853	1,454,239
Totals (1901 to 1911, inclusive).....	25,160	3,655	12.69	29,409	6,147,260
1912.....	6,083	498	7.57	4,322	3,049,722
1913.....	7,078	367	4.93	3,742	3,549,242
1914.....	5,274	238	4.32	3,450	2,644,593
1915.....	1,155	103	8.19	4,373	588,124
1916.....	20	69	77.53	4,064	19,389
1917.....	272	121	30.78	3,312	140,487
1918.....	650	119	15.47	2,907	336,757
1919.....	4,066	267	6.16	3,244	2,069,669
1920.....	363	181	33.27	5,529	538,479
1921.....	885	1,550	63.66	6,807	474,332
1922.....	1,459	287	16.44	7,532	743,032
1923.....	652	59	8.30	6,682	434,557
1924.....	625	51	7.54	5,661	334,039
1925.....	Nil	Nil	Nil	5,992	308,659
1926.....	Nil	Nil	Nil	3,947	25,969
1927.....	Nil	Nil	Nil	5,987	14,844
1928.....	2	1	33.33	5,087	25,679
1929.....	Nil	1	100.00	5,480	30,795
1930.....	Nil	Nil	Nil	5,682	30,799
1931.....	Nil	Nil	Nil	5,783	28,846
1932.....	Nil	Nil	Nil	4,387	11,584
1933.....	Nil	1	100.00	3,626	9,152
1934.....	Nil	2	100.00	2,156	7,237
1935.....	Nil	Nil	Nil	2,103	6,506
1936.....	Nil	Nil	Nil	2,138	6,501
1937.....	Nil	1	100.00	2,059	9,893

The Chinese Immigration Act of 1923 (13-14 Geo. V, c. 38),* limits the entry to or landing in Canada of persons of Chinese origin or descent, irrespective of allegiance or citizenship, to the following classes:—

- (a) Members of the diplomatic corps or other government representatives, their suites and their servants, and consuls and consular agents;
- (b) Children born in Canada of parents of Chinese origin or descent, who have left Canada for educational or other purposes, on substantiating their identity to the satisfaction of the controller at the port or place where they seek to enter on their return;
- (c) Merchants as defined by such regulations as the Minister may prescribe; students coming to Canada for the purpose of attending, and while in actual attendance at, any Canadian university or college authorized by statute or charter to confer degrees.
- (d) Persons in transit through Canada.

Classes (c) and (d) are to possess passports issued by the Government of China and endorsed by a Canadian immigration officer. As a result of this legislation no Chinese were admitted to the country as immigrants in the fiscal years ended 1925, 1926, and 1927; three are shown by the above table to have been admitted in 1928, one in 1929, none in 1930, 1931 or 1932, one in 1933, two in 1934, none in 1935 or 1936, and one in 1937.

Japanese Immigrants.—Japanese immigration to Canada commenced about 1896, and a total of some 12,000 came in between then and 1900, but at the Census of 1901 the total number enumerated as domiciled in the Dominion was only 4,738; in 1911, 9,021; in 1921, 15,868; in 1931, 23,342—22,205 of these latter being domiciled in British Columbia. The immigration of Japanese was especially active in the fiscal years 1906 to 1908, in which three years a total of 11,565 entered the country. In 1908 an agreement was made with the Japanese Government, under which the latter undertook to limit the number of passports issued to Japanese immigrants to Canada. Japanese immigration has been very restricted since 1929, only 103 Japanese immigrants having entered Canada in the fiscal year 1937.

East Indian Immigrants.—East Indian immigration to Canada, like Japanese, is shown by Table 15 to have been negligible down to 1907, when no fewer than 2,124 East Indian immigrants arrived. However, as a consequence of the operation of the Immigration Regulations, East Indian immigration has for years been comparatively small. A resolution of the Imperial War Conference of 1918 declared that “it is the inherent function of the Governments of the several communities of the British Commonwealth that each should enjoy complete control of the composition of its own population by means of restriction on immigration from any of the other communities”. However, it was recommended that East Indians, already permanently domiciled in other British countries, should be allowed to bring in their wives and minor children. In the ten fiscal years 1928–37 only 456 East Indians, many of them women and children, were admitted to Canada.

Expenditures on Immigration.—The sums expended by the Dominion Government on immigration in each of the fiscal years ended 1868 to 1937, inclusive, as stated in the Public Accounts issued annually by the Department of Finance, are shown in Table 17.

Emigration from Canada.—An important factor tending to offset the immigration activities of the past was a movement from Canada to the United States which attained considerable proportions at certain periods. The quota system of immigration regulation, applied by the United States Government against immigrants generally, but not against the Canadian born, had the effect of limiting immigration to the United States and thereby encouraging Canadians to enter

* R.S.C., 1927, c. 95.

that country. No record of this movement had ever been kept by the Canadian Government, and, while its seriousness was recognized, its magnitude, as indicated by the United States returns, was questioned on the ground that these returns did not make allowance for Canadians returning to Canada after a more or less extended period of residence in the United States. The Canadian Department of Immigration and Colonization was convinced that a very considerable return movement was taking place, but, until 1924, no attempt was made to ascertain the exact magnitude of that movement. In that year immigration officers were instructed to take note of Canadians returning to Canada from the United States after having left Canada to reside in that country. The results are tabulated in Table 18.

Another circumstance which has in the past, occasioned a considerable movement from Canada to the United States has, no doubt, been the practice of Europeans to enter Canada and declare themselves *bona fide* immigrants, with the real intention of entering the United States as soon as the quota restrictions would permit them to do so. The tightening-up of the United States regulations *re* persons entering the United States from Canada, and the active co-operation of the Canadian Department of Immigration and Colonization in discouraging this traffic, seem to have effectually met this situation.

17.—Expenditures on Immigration in the fiscal years ended June 30, 1868-1906, and Mar. 31, 1907-37.

(Compiled from the Public Accounts.)

Fiscal Year.	\$	Fiscal Year.	\$	Fiscal Year.	\$	Fiscal Year.	\$
1868.....	36,050	1886.....	257,355	1904.....	744,788	1922.....	2,052,371
1869.....	26,952	1887.....	341,236	1905.....	972,357	1923.....	1,987,745
1870.....	55,966	1888.....	244,789	1906.....	842,668	1924.....	2,417,374 ²
1871.....	54,004	1889.....	202,499	1907 ¹	611,201	1925.....	2,823,920 ²
1872.....	109,954	1890.....	110,092	1908.....	1,074,697	1926.....	2,328,931 ²
1873.....	265,718	1891.....	181,045	1909.....	979,326	1927.....	2,338,992
1874.....	291,297	1892.....	177,605	1910.....	960,676	1928.....	2,704,698
1875.....	278,777	1893.....	180,677	1911.....	1,079,130	1929.....	2,631,967
1876.....	338,179	1894.....	202,235	1912.....	1,365,000	1930.....	2,757,331
1877.....	309,353	1895.....	195,653	1913.....	1,427,112	1931.....	2,255,249
1878.....	154,351	1896.....	120,199	1914.....	1,893,298	1932.....	1,873,006
1879.....	186,403	1897.....	127,438	1915.....	1,658,182	1933.....	1,406,031
1880.....	161,213	1898.....	261,195	1916.....	1,307,480	1934.....	1,155,314
1881.....	214,251	1899.....	255,879	1917.....	1,181,991	1935.....	1,066,869
1882.....	215,339	1900.....	434,563	1918.....	1,211,954	1936.....	1,123,991
1883.....	373,958	1901.....	444,730	1919.....	1,112,079	1937.....	1,119,317
1884.....	511,209	1902.....	494,842	1920.....	1,388,185		
1885.....	423,861	1903.....	642,914	1921.....	1,688,961	Total.....	62,423,972

¹ Nine months.
\$599,797; 1926, \$70,661.

² Includes expenditures on British Empire Exhibition: 1924, \$649,882; 1925,

Table 18 shows the number of Canadians who had gone to the United States for purposes of permanent residence and who returned to Canada during the period from April 1, 1924, to Dec. 31, 1937.

18.—Canadians Returned from the United States, calendar years 1924-37.

Calendar Year.	Canadian-Born Citizens.	British Born who had Acquired Canadian Domicile.	Naturalized Canadian Citizens.	Total.	Calendar Year.	Canadian-Born Citizens.	British Born who had Acquired Canadian Domicile.	Naturalized Canadian Citizens.	Total.
1924.....	31,217	3,736	2,364	37,317	1931....	18,503	1,135	714	20,352
1925.....	33,774	3,658	2,555	39,987	1932....	16,801	809	610	18,220
1926.....	53,736	5,792	2,765	62,293	1933....	9,330	457	422	10,209
1927.....	36,838	3,560	1,680	42,078	1934....	5,926	739	607	7,272
1928.....	30,436	2,674	1,010	34,120	1935....	4,961	632	785	6,378
1929.....	27,328	2,265	886	30,479	1936....	4,649	297	222	5,168
1930.....	28,230	2,176	1,202	31,608	1937....	4,443	377	347	5,167

¹ Nine months.

The movement of population between the two countries now appears to be slightly towards the United States. In the U.S. fiscal year ended June 30, 1937, the total movement from Canada to that country was 17,224, made up as follows: immigrants, 11,799; U.S. citizens returning after residence in Canada, 5,211; and persons deported from Canada, 214. The movement towards Canada totalled 9,185, made up as follows: immigrants, 3,889 (of whom 2,862 were U.S. citizens); persons deported to Canada, 1,833; and persons permitted to depart voluntarily to Canada in lieu of deportation proceedings, 3,463. Canadian immigration figures for the same period show 5,347 immigrants admitted to Canada and 5,250 returning Canadians, a total of 10,597. The discrepancy between the two series is probably due to incomplete emigration statistics.

In the past five years there has also been considerable emigration from Canada to the British Isles. Table 19, taken from the *Statistical Abstract of the United Kingdom*, shows the movement of population between the United Kingdom and British North America from 1924 to 1936. Inasmuch as the movement between the British Isles and Newfoundland is negligible, the table may be taken as presenting a fair picture of immigrant and emigrant movement between Canada and the United Kingdom.

19.—Numbers of Passengers of British Nationality Changing Their Permanent Residence between the United Kingdom and British North America, calendar years 1924-36.

(From the *Statistical Abstract of the United Kingdom*.)

Calendar Year.	Leaving U.K. for B.N.A.	Leaving B.N.A. for U.K.	Net Gain (+) or Loss (-) of Population to Canada.	Calendar Year.	Leaving U.K. for B.N.A.	Leaving B.N.A. for U.K.	Net Gain (+) or Loss (-) of Population to Canada.
1924.....	63,016	15,822	+47,194	1931.....	7,620	17,864	-10,244
1925.....	38,662	13,939	+24,723	1932.....	3,104	21,187	-18,083
1926.....	49,632	10,481	+39,151	1933.....	2,243	16,371	-14,128
1927.....	52,916	12,570	+40,346	1934.....	2,167	12,128	- 9,961
1928.....	54,709	15,804	+38,905	1935.....	2,175	9,712	- 7,537
1929.....	65,558	12,294	+53,264	1936.....	2,281	10,107	- 7,826
1930.....	31,074	15,820	+15,254	1937.....	2,850	8,970	- 6,120

In Table 20 will be found the numbers of returning Canadians and other non-immigrant transoceanic passengers entering Canada during the calendar years 1935 and 1936, by class of travel, with totals for the years 1930 to 1934. Figures covering the fiscal years 1926 to 1934, will be found at p. 228 of the 1934-35 Year Book.

20.—Returning Canadians and Other Non-Immigrants Entering Canada via Ocean Ports, by Class of Travel, calendar years 1935 and 1936, with Totals for calendar years 1930-34.

NOTE.—Figures in this table cover transoceanic passengers only.

Calendar Year and Item.	Transoceanic Passengers.			
	Saloon.	Cabin Class.	Third Class.	Total.
Totals, 1930	6,064	14,458	30,479	51,001
Totals, 1931	5,170	10,281	26,741	42,192
Totals, 1932	5,333	9,314	27,285	41,932
Totals, 1933	4,965	8,447	23,644	37,056
Totals, 1934	6,103	9,119	23,928	39,150
CALENDAR YEAR 1935.				
Canadian born, returning.....	2,281	3,206	6,032	11,519
British born, returning.....	473	1,711	10,724	12,908
British naturalized, returning.....	256	386	1,537	2,179
Alien nationals, returning.....	44	96	1,406	1,546
Non-immigrant, tourist.....	1,256	3,174	4,450	8,880
“ professional.....	Nil	Nil	Nil	Nil
“ student.....	Nil	Nil	Nil	Nil
“ theatrical.....	Nil	Nil	Nil	Nil
“ in transit.....	1,464	1,394	461	3,319
“ Diplomatic Corps.....	6	14	8	28
Totals, 1935	5,780	9,981	24,618	40,379
CALENDAR YEAR 1936.				
Canadian born, returning.....	1,740	4,160	8,509	14,409
British born, returning.....	321	1,927	13,474	15,722
British naturalized, returning.....	173	466	1,623	2,262
Alien nationals, returning.....	32	137	1,337	1,506
Non-immigrant, tourist.....	714	4,130	4,751	9,595
“ professional.....	Nil	Nil	9	9
“ student.....	61	7	7	75
“ theatrical.....	Nil	Nil	Nil	Nil
“ in transit.....	1,348	1,514	365	3,227
“ Diplomatic Corps.....	2	15	1	18
Totals, 1936	4,391	12,356	30,076	46,823

Section 2.—Colonization Activities.

Recent information on this subject was given at pp. 201-202 of the 1936 edition of the Year Book. To it the interested reader is referred.

CHAPTER VII.—SURVEY OF PRODUCTION.*

A gain of more than 7 p.c. in the net value of total production over the preceding year was indicated for 1935. The net value of commodities produced stood at \$2,395,000,000 against \$2,234,000,000 in the preceding year. As the level of commodity prices remained relatively steady during the interval, the gain represents considerable betterment in the volume of productive operations. The general nature of the improvement was shown by the fact that each of the nine main branches of production participated in the advance.

While the lowest point of the recent depression was reached in 1933, revival commenced in the latter part of the year and has been fairly continuous since that time. With regard to 1935, price and volume indexes indicate that a further gain in net production occurred. The index of wholesale prices averaged 3.5 p.c. higher than in 1935, while the gain in the index of industrial production was nearly 10.4 p.c., and the index of general employment recorded an advance of 4.3 p.c.

The Definition of 'Production'.—The term 'production' is used here in its popular acceptance, *i.e.*, as including such processes as the growing of crops, extraction of minerals, capture of fish, conversion of water power into electric current, manufacturing, etc.—in economic phrase, the creation of 'form utilities'. It does not include various activities which are no less productive in a broad and strictly economic sense, such as (a) transportation, refrigeration, merchandising, etc., which add the further utilities of 'place', 'time', and 'possession' to commodities already worked up into form, and (b) personal and professional services, such as those of the teacher and the doctor, which are not concerned with commodities at all, but are nevertheless essential to any civilized society—representing, in economic language, the creation of 'service utilities'.

As showing the importance of these latter activities, it may be pointed out, for comparison with the figures in the accompanying tables, that steam railway gross earnings in 1935, the latest year for which complete statistics of production are available, amounted to \$310,107,155, street railway gross earnings to \$40,442,320, and telephone and telegraph earnings to \$66,771,312, all of which, from a broad point of view, may be considered as production. Further, it may be noted that, according to the Census of 1931, out of 3,927,591 persons of ten years of age or over recorded as gainfully occupied, 306,273 were engaged in transportation activities, 387,315 in trade, 92,317 in finance, and 767,705 in service occupations. While 81,610 of the latter were engaged in custom and repair work, the value of which is included in the survey of production, the value of the production of the remaining 1,472,000 gainfully occupied persons in the four occupational groups just mentioned would not appear to be included to any extent in the survey of production. Then, on the assumption that 1,472,000 gainfully occupied persons whose production is not included in the survey were no less productive in the broad sense of the term than the remaining 2,455,591† gainfully occupied persons, about three-fifths should be added to our total net production to arrive at an estimate of the grand total value of the production of all gainfully occupied Canadians. Since the net value of

* Revised by Sydney B. Smith, M.A., Dominion Bureau of Statistics.

† This figure includes 169,263 gainfully occupied persons whose industries were not specified but who were mainly general labourers and office clerks. The products of the labour of these persons were probably mainly included in the survey of production, but here it is assumed that they were all so included.

production of commodities as stated in this survey was \$2,394,720,688 in 1935, the grand total money value of the productive activities of the gainfully occupied population of Canada in the same year may be estimated at \$3,832,000,000 in round figures. (See the item "Income, national" in the index of this volume.)

'Gross' and 'Net' Production.—The values of products are shown under two headings, namely, "gross" and "net". Gross production represents the total value of all the individual commodities produced under a particular heading. Net production represents an attempt to eliminate the value of materials, fuel, and electricity consumed in the production process. The net figures, it will be seen, appear chiefly in the case of secondary production or manufactures, though eliminations were also made in certain cases in the primary or extractive industries, as, for example, seed in the case of field crops, and feed in the case of farm animals. On the other hand, such items as fertilizers in the case of field crops, and reforestation in the case of forestry, are disregarded as partaking of the nature of replacement. The cost of fuel and electricity is deducted in accordance with Resolution 23 of the Conference of British Commonwealth Statisticians, 1935, which states: "The term *net output* or *net value of production* should be used to denote the value added in each industry to the cost of the objects used in production, including all materials, whether transformed or not".

Difficulties in Differentiating between the Branches of Production.—A survey of production must differentiate between the more important branches and at the same time give a purview of the whole which will be free from overlapping. This is somewhat difficult to present with clearness, in view of the varying definitions that attach to industrial groups from different points of view. For example, brick, tile, and cement are frequently included under "mineral production" as being the first finished products of commercial value resulting from the productive process; frequently, however, they are classified under "manufactures" in view of the nature of the productive process—either allocation being correct according to the point of view. In the summing up, production in such industries is regarded as primary production and also as secondary production, but the duplication is eliminated in the grand totals.

Branches of Production.—The primary industries of agriculture, fishing, forestry, mining, etc., are separated in this statement from the secondary or manufacturing processes. The close association between the two and the overlappings that are apt to occur have already been pointed out. As further explaining the procedure that has been followed in drawing up the tables, the following notes are appended:—

Agriculture.—Dairy factories are included under this heading; farm dairy products (gross) include the milk consumed whole and sold to dairy factories, and the butter, etc., made on the farm. The duplication is eliminated when obtaining the grand total values of gross and net production.

Forestry.—Forestry production is understood to consist of the operations in the woods as well as those of sawmills and pulp-mills, the latter being limited to the making of products such as pulp and paper, lumber, lath, shingles, and cooperage stock.

Fur Production.—The item of fur production is limited to wild-life production. To obtain a total of the pelts produced in Canada, it would be

necessary to add to the wild-life output the production of pelts on fur farms, which is included in the total for agriculture.

Mineral Production.—Under mineral production many items are included that are also allocated to manufactures. Considerable overlapping exists as between mineral production on the one hand and manufactures on the other. The Dominion Bureau of Statistics presents the detailed statistics of these groups (the chief of which are smelters, brick, cement, lime, etc.) in its reports on mineral production, since their product is the first to which a commercial value is ordinarily assigned.

Construction.—Due to the availability of the totals compiled by a new branch of the Dominion Bureau of Statistics, the treatment of construction data was altered beginning with 1934. The records prepared by the MacLean Building Reports, Limited, were used from 1920 to 1933, 35 p.c. being deducted from the gross totals to obtain the net value of production for the industry. An element of incomparability with previous figures was thus introduced, but the use of official records in this connection is desirable.

Total Manufactures.—The figure given for this heading is a comprehensive one including the several items listed with the extractive industries above, though also frequently regarded as manufactures, *viz.*, dairy factories, fish canning and curing, sawmills, pulp and paper mills, certain mineral industries, and electric power. This duplication is eliminated from the grand totals as shown in the tables. The figures given for total manufactures are inclusive of the value of the products of all manufacturing processes closely associated with the extractive industries that are frequently included under this heading; hence it is obvious that the grand total is equivalent to an amount obtained by adding the values for total manufactures and for the other eight divisions, and deducting the amount of duplication between manufactures and the primary industries.

Section 1.—The Leading Branches of Production in 1935.

The net value of a nation's commodity production is usually an excellent criterion of the purchasing power of the people. Confining the analysis to the net production of commodities—net production signifying the value left in the producers' hands after the elimination of the value of materials consumed in the production process—it is observed that, after recording successive declines for five years, the net value of Canadian production turned upward in 1934 to register a substantial gain over the preceding year. This advance was continued in 1935 when the net value of commodities produced, estimated by the Dominion Bureau of Statistics on the basis of data compiled by its various branches, was \$2,395,000,000 compared with a revised estimate of \$2,234,000,000 in 1934. The gain of more than 7 p.c. represents a marked betterment over the preceding year in all productive operations. Each of the nine main branches of production participated in the advances of 1934 and 1935. The greatest absolute gains were recorded in manufacturing and agriculture, but the largest percentage increases were in mining and forestry. Primary production showed a better percentage gain than secondary, indicating a decided revival in the production of raw materials and a greater utilization of our natural resources. Certain changes in general method, occasioned by the Conference of British Commonwealth Statisticians of 1935, unfortunately

preclude exact comparability with years prior to 1934, given in earlier editions of the Year Book, and statistics in the tables given below are, therefore, limited to the years 1934 and 1935.

The net output of agriculture in 1935 was greater than in any other year since 1930. The increase over 1934 amounted to \$30,600,000 or 5.2 p.c., the total reaching \$623,000,000. Mining continued to be the most progressive of Canadian industries and has extended, year by year, the upturn inaugurated in 1933.

The percentage gain in the value of manufacturing stood on a par with that of agriculture, the net total advancing 5.7 p.c. or \$69,300,000 over the comparable figure for 1934.

1.—Gross and Net Values of Production in Canada, by Industries, 1934¹ and 1935.

Division of Industry.	1934. ¹		1935.		Percentage Increase in Net Value 1935 from 1934.	Percentage of Net Value by Industry to Total Net Production 1935.
	Gross.	Net. ²	Gross.	Net. ²		
	\$	\$	\$	\$	p.c.	p.c.
Agriculture.....	1,006,257,616 ³	592,195,000	1,019,866,099 ³	622,772,000	5.2	26.01
Forestry.....	313,659,369	208,207,484	344,758,108	227,500,346	9.3	9.50
Fisheries.....	45,661,143	34,022,323	45,386,749	34,427,854	1.2	1.44
Trapping.....	8,636,885	8,636,885	8,877,331	8,877,331	2.8	0.37
Mining.....	344,978,399 ⁴	209,073,789	429,817,259 ⁴	238,581,268	14.1	9.96
Electric power.....	124,463,613	122,461,993	127,177,954	125,123,078	2.2	5.22
Totals, Primary Production.....	1,843,657,025	1,174,597,474	1,975,883,500	1,257,281,877	7.0	52.50
Construction.....	186,198,890	115,406,755	215,548,873	120,815,289	4.7	5.05
Custom and repair ⁵ .	87,646,270	62,444,353	97,109,740	66,454,802	6.4	2.78
Manufactures ⁶	2,533,758,954	1,222,943,899	2,797,400,424	1,292,242,142	5.7	53.96 ⁷
Totals, Secondary Production ⁷	2,807,604,114	1,400,795,007	3,110,059,037	1,479,512,233	5.6	61.78 ⁷
Grand Totals.....	4,031,421,085	2,233,697,018	4,398,333,710	2,394,720,688	7.2	100.00

¹ A number of items for 1934 have undergone revision since the publication of the 1937 Year Book.

² In conformance with Resolution 23 adopted by the Conference of British Commonwealth Statisticians of 1935, the cost of fuel and purchased electricity was deducted from the gross value of manufactures, mining, forestry, and electric power for 1934 and 1935 in arriving at the net figures. This is in addition to the usual deduction for cost of materials.

³ The gross values of agricultural production here exceed those given in Chapter VIII, Agricultural Statistics, of this edition of the Year Book, by the amounts paid to patrons of dairy factories for milk and cream.

⁴ Gross values comprise the mineral production, as shown in Chapter XII, Table 1, plus the value of ores and other raw materials of the smelting industry.

⁵ Statistics of custom and repair shops, including custom clothing, dyeing and laundry work, boot, jewellery, automobile and bicycle repairing, and custom and repair work by foundries were not collected after 1921. The totals for 1934 and 1935 were estimated according to the percentage change in the data for manufacturing.

⁶ The item "Manufactures" includes dairy factories, sawmills, pulp and paper mills, fish canning and curing, electric power production, shipbuilding, and certain mineral industries which are also included in other headings above. This duplication, amounting in 1934 to a gross of \$619,840,054 and a net of \$341,695,463 and in 1935 to a gross of \$687,608,827 and a net of \$342,073,422, is eliminated from the grand total.

⁷ Secondary production includes the above-mentioned duplication. The percentage of the net manufactures, freed from all duplication, to the total net production in 1935 was 39.67, and, under like conditions, the proportion of all secondary production to the grand total of net production was 47.5 p.c.

2.—Detailed Itemized Statement of the Net Values of Production in Canada during 1934¹ and 1935.

Classification.	1934. ¹	1935.
PRIMARY PRODUCTION.		
Agricultural Production.....	592,195,000	622,772,000
Forestry—		
Logs and bolts.....	29,115,515	34,077,938
Pulpwood.....	38,302,807	41,195,871
Hewn railway ties.....	1,541,901	3,188,651
Fuel.....	31,489,524	31,864,500
All other forest products.....	5,089,985	5,134,819
Totals, Operations in the Woods.....	105,539,732	115,461,779
Sawmill products.....	24,971,159	29,513,090
Pulp and paper mill products.....	77,696,593	82,525,477
Totals, Milling Operations.....	102,667,752	112,038,567
Totals, Forestry Production.....	208,207,484	227,500,346
Fisheries—		
Fish prepared domestically or sold fresh by fishermen.....	8,076,115	9,796,892
Sales to canning and curing establishments.....	11,638,820	10,958,895
Values added domestically.....	1,889,281	1,172,606
Fish-canning and -curing establishments (values added).....	12,418,107	12,499,461
Totals, Fisheries Production.....	34,022,323	34,427,854
Trapping—		
Fur production (wild life).....	8,636,885	8,877,331
Mineral Production.....	209,073,789	238,581,268
Electric Light and Power.....	122,461,993	125,123,078
TOTALS, PRIMARY PRODUCTION.....	1,174,597,474	1,257,281,877
SECONDARY PRODUCTION.		
Construction.....	115,406,755	120,815,289
Custom and Repair.....	62,444,353	66,454,802
Manufactures—		
Vegetable products.....	210,899,307	217,051,454
Animal products.....	94,998,316	99,633,595
Textiles.....	160,723,494	166,228,533
Wood and paper.....	223,240,884	239,387,227
Iron and steel.....	143,369,504	173,634,965
Non-ferrous metals.....	112,155,502	107,895,470
Non-metallic minerals.....	71,357,352	75,846,415
Chemicals.....	62,216,030	66,001,290
Miscellaneous, including central electric stations.....	143,983,510	146,560,193
Totals, Manufactures ²	1,222,943,899	1,292,242,142
TOTALS, SECONDARY PRODUCTION.....	1,400,795,067	1,479,512,833
Grand Totals ²	2,233,697,018	2,394,720,688

¹ A number of items for 1934 have undergone revision since the publication of the 1937 Year Book.

² The item "Totals, Manufactures" includes the following industries, which are also shown elsewhere, the amount of the duplication being deducted from the grand total:—

	1934.	1935.
Dairy factories.....	29,912,319	30,832,166
Sawmills and pulp and paper mills.....	102,667,752	112,038,567
Fish canning and curing.....	8,166,192	8,340,663
Mineral industries.....	78,487,207	65,738,948*
Electric power.....	122,461,993	125,123,078
Totals.....	341,695,463	342,073,422
Manufactures.....	881,248,436	950,168,720

* The decrease in the duplication for mineral industries was due to a change in method of valuation of ores.

Relative Importance of the Several Branches of Production.—Owing to adverse weather conditions and low prices experienced by agriculture, the relative position of manufacturing has become more pronounced in recent years. Agricultural production in 1935 represented about 26 p.c. of the net output of all branches while the total value added by the manufacturing process was nearly 54 p.c. of the total net production. However, a number of industries listed under manufactures

are also included in the several extractive industries with which they are associated. Eliminating this duplication, the output of the manufacturing industries not elsewhere included, was 39.7 p.c. of the total net production. Mining held third place in 1935 with a percentage of nearly 10 p.c., followed closely by forestry with 9.5 p.c. The fifth and sixth places were held by electric power and construction, respectively, while custom and repair, fisheries, and trapping followed in the order named.

Section 2.—The Provincial Distribution of Production.

Seven of the nine provinces showed gains in net production in 1935 over the preceding year. Due to increases of important proportions in each of the three provinces, the Maritimes showed a greater percentage gain than in any other economic area. Increases in Prince Edward Island, Nova Scotia, and New Brunswick were 8.6 p.c., 9.9 p.c., and 10.4 p.c., respectively.

Extending the gain of the preceding year, the net production of Ontario recorded an increase of 8.1 p.c. in 1935. The increase in Quebec at 6.1 p.c. was also substantial. The trend was uneven in the Prairie Provinces. Saskatchewan, due mainly to field crops, showed a gain of 27.5 p.c., but minor declines were recorded in Manitoba and Alberta. Recovery continued in British Columbia, an advance of 8.8 p.c. having been shown over the preceding year.

Relative Production by Provinces, 1935.—Ontario held first place among the nine provinces in the creation of new wealth, producing 43.7 p.c. of the Dominion total compared with 43.4 p.c. in 1934. Quebec followed with an output of 25.4 p.c. against 25.6 p.c. in the preceding year. British Columbia and Alberta were in third and fourth places, respectively, the contribution of the former in 1935 being 7.8 p.c. compared with 6.5 p.c. for Alberta. Saskatchewan and Manitoba were in fifth and sixth places, respectively. Nova Scotia, New Brunswick, and Prince Edward Island followed in the order named.

3.—Summary Analysis of the Value of Production in Canada, by Provinces, 1934¹ and 1935.

Province.	1934. ¹				1935.			
	Gross Value.	Net Value. ²			Gross Value.	Net Value. ²		
		Amount.	Per-centage.	Per Capita. ³		Amount.	Per-centage.	Per Capita. ³
	\$	\$		\$	\$	\$		\$
P. E. I.....	17,864,849	10,181,232	0.5	114.40	19,052,646	11,059,670	0.5	124.27
N. S.....	131,399,711	76,628,789	3.4	145.96	144,918,904	84,186,607	3.5	159.75
N. B.....	98,679,310	55,404,590	2.5	130.36	106,307,360	61,184,408	2.6	142.62
Que.....	1,058,503,197	572,339,409	25.6	189.64	1,137,261,900	607,222,088	25.4	198.31
Ont.....	1,794,724,551	971,143,305	43.4	267.61	1,984,461,443	1,050,064,179	43.7	285.89
Man.....	195,670,759	106,321,772	4.8	149.54	207,187,939	102,442,524	4.3	144.08
Sask.....	191,335,124	106,960,920	4.8	114.76	223,428,756	136,374,259	5.7	146.48
Alta.....	255,549,707	162,784,883	7.3	215.32	250,995,852	155,098,958	6.5	203.01
B.C. and Yukon.....	287,693,877 ⁴	171,932,118 ⁴	7.7	232.66	324,718,910 ⁴	187,087,995 ⁴	7.8	249.78
Totals....	4,031,421,085	2,233,697,018	100.0	206.37	4,398,333,710	2,394,720,688	100.0	219.00

¹ A number of items for 1934 have undergone revision since the publication of the 1937 Year Book.

² In conformance with Resolution 23 adopted by the Conference of British Commonwealth Statisticians of 1935, the cost of fuel and purchased electricity was deducted from the gross value of manufactures, mining, forestry, and electric power for 1934 and 1935. This is in addition to the usual deduction for cost of materials.

³ Estimates of population on which these figures are based will be found on p. 155.

⁴ The value of production in Yukon, mainly in the mining and trapping industries (including similar industries of the N.W.T.), was \$2,996,649 gross and \$2,515,988 net in 1934 and \$3,375,554 gross and \$3,110,950 net in 1935.

Per Capita Production by Provinces.—In the foregoing table the net commodity production is appraised on a per capita basis by provinces.

Owing to its preëminent industrial position, Ontario had a net commodity production of nearly \$286 per capita in 1935, an improvement of \$18 per capita over 1934, principally due to appreciable advances in manufacturing, agriculture, and mining. British Columbia ranked second with a per capita production of \$250, registering, largely because of forestry and manufacturing, an increase of \$17 per capita over 1934. Alberta held third place with \$203 per capita, a decline of \$12 from 1934 due mainly to reduction in agriculture. Quebec, with a per capita production of \$198, was fourth in rank, increasing its per capita figure by nearly \$9 over 1934. Nova Scotia with \$160, Saskatchewan \$146, Manitoba \$144, New Brunswick \$142, and Prince Edward Island \$124, produced in the order named. Of the nine provinces, Manitoba and Alberta alone showed recession which was limited in the former province to about \$5.50 per capita.

The Dominion figure of net commodity production at \$219 per capita was 6 p.c. or \$13 in advance of the figure for 1934. The estimated increase in population in 1935 over 1934 was only 1 p.c.

Section 3.—Leading Branches of Production in each Province, 1935.

Maritime Provinces.—The net value of production in the Maritimes during 1935 rose 10 p.c. or \$14,216,000 over the preceding year. Agriculture contributed 23.3 p.c. while manufacturing, eliminating all duplication, accounted for 22 p.c. Construction was much more active than in 1934. Mining remained relatively the same with nearly 11 p.c. of the Maritime total attributable to this industry. Fisheries showed a recession of 8.1 p.c., although actual net value was up nearly \$400,000.

Quebec.—Manufacturing continued to be the leading industry in Quebec, contributing, without duplication, 46.4 p.c. of the net value of production during 1935. Agriculture accounted for over 18 p.c. of the net output while forestry, on the revised basis, rose in importance to nearly 14 p.c. of the net total.

Ontario.—The net value of manufacturing in Ontario during 1935, less duplication, was exactly 50 p.c. of the provincial total. Agriculture accounted for 20 p.c. or a net value of \$209,182,000. Mining advanced to 12.4 p.c. while forestry also showed betterment over the previous year at 5.5 p.c. of the provincial total.

Prairie Provinces.—Agriculture accounted for 61.0 p.c. of the value of net production of the Prairie Provinces in 1935, a drop of 1 p.c. from the preceding year. Manufacturing advanced slightly at 17.3 p.c. Mining showed a notable gain, the percentage increase being from 6.4 to 7.3 p.c. of the total for the Prairie Provinces.

British Columbia and Yukon.—The net output from manufacturing in British Columbia and Yukon during 1935 was \$86,196,000 or 46.1 p.c. of the provincial net production, but over half of this amount was derived from manufacturing processes closely associated with the primary industries, such as logging, mining, and fishing. Eliminating this duplication, manufactures comprised 21.7 p.c. of the net provincial output, whereas forestry supplied 25.8 p.c., mining 15.7 p.c., agriculture 13.9 p.c., and fisheries 8.1 p.c.

Tables 4 and 4A give the details of gross and net production, by industries, for each province for the years 1934 and 1935, respectively. Only in Prince Edward Island, Saskatchewan and Alberta does agriculture now rank in first place, manufactures being more important than agriculture in each of the other six provinces.

Tables 5 and 5A offer some very interesting comparisons. For instance, on a provincial percentage basis mining is very much more important in Nova Scotia than it is in the premier mining province of Ontario. Again, the generation of electric power is relatively a more important industry in Nova Scotia, in New Brunswick, in Manitoba, and in British Columbia than it is in Ontario. While manufacturing is of first importance in Ontario and Quebec, it is also of major relative importance in Manitoba and Nova Scotia.

4.—Gross and Net Values of Production, Classified for each Province, by Industries, 1934.

NOTE.—For Dominion totals, see Tables 1 and 2.

GROSS PRODUCTION.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	\$	\$	\$	\$	\$
Agriculture.....	13,366,859	27,918,977	25,653,127	199,857,806	332,574,824
Forestry.....	612,611	12,603,857	25,428,158	119,913,324	82,065,315
Fisheries.....	1,455,417	10,618,423	4,552,178	2,752,847	2,218,550
Trapping.....	1,646	269,973	138,263	657,448	1,575,934
Mining.....	Nil	21,773,899	2,137,835	56,823,641	183,767,591
Electric power.....	279,745	4,904,770	3,071,568	46,818,247	43,498,715
Construction.....	297,918	9,868,541	6,163,183	42,825,745	96,488,265
Custom and repair.....	192,906	2,376,604	1,501,625	16,401,885	38,049,543
Manufactures ¹	3,302,586	60,844,581	54,057,847	766,498,000	1,255,325,701
Totals¹.....	17,864,849	131,399,711	98,679,310	1,058,503,197	1,794,724,551

Industry.	Manitoba.	Saskat- chewan	Alberta.	British Columbia and Yukon. ²
	\$	\$	\$	\$
Agriculture.....	75,675,073	135,838,027	155,707,755	39,665,168
Forestry.....	2,455,205	2,376,082	3,785,723	64,419,094
Fisheries.....	1,465,358	219,772	245,405	22,133,193
Trapping.....	1,075,450	1,280,458	1,132,960	2,504,753 ²
Mining.....	10,447,132	3,239,328	19,056,775	47,732,198 ²
Electric power.....	6,378,674	4,229,402	4,567,199	10,715,293
Construction.....	6,349,382	6,907,979	7,541,055	9,756,822
Custom and repair.....	7,758,807	6,190,733	6,876,614	8,297,553
Manufactures ¹	105,358,000	42,261,723	69,389,118	176,721,398
Totals¹.....	195,670,759	191,335,124	255,549,707	287,693,877²

NET PRODUCTION.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	\$	\$	\$	\$	\$
Agriculture.....	7,391,080	14,243,050	11,196,570	111,650,630	189,355,640
Forestry.....	550,165	9,096,551	16,988,174	77,670,128	52,343,833
Fisheries.....	963,926	7,673,865	3,679,970	2,306,517	2,218,550
Trapping.....	1,646	269,973	138,263	657,448	1,575,934
Mining.....	Nil	14,067,797	1,863,476	26,078,617	117,104,033
Electric power.....	240,569	4,170,751	2,910,473	46,814,407	43,477,976
Construction.....	161,569	7,224,463	3,900,748	23,531,437	61,315,609
Custom and repair.....	158,064	1,741,727	1,427,268	12,548,882	26,711,864
Manufactures ¹	1,281,041	28,406,917	26,357,257	380,453,666	611,303,862
Totals¹.....	10,181,232	76,628,789	55,404,590	572,339,409	971,143,305

For footnote, see end of table, p. 220.

4.—Gross and Net Values of Production, Classified for each Province, by Industries, 1934—concluded.

NET PRODUCTION—concluded.

Industry.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon. ²
	\$	\$	\$	\$
Agriculture.....	45,490,620	78,547,390	109,009,230	25,310,790
Forestry.....	2,152,357	2,218,120	3,410,820	43,777,336
Fisheries.....	1,465,358	219,772	245,405	15,248,960
Trapping.....	1,075,450	1,280,458	1,132,960	2,504,753 ²
Mining.....	6,857,321	2,340,189	14,703,214	26,059,142 ²
Electric power.....	6,310,475	3,460,775	4,401,197	10,675,370
Construction.....	3,612,232	4,327,753	5,377,955	5,954,989
Custom and repair.....	5,317,631	4,409,227	4,315,839	5,813,851
Manufactures ¹	48,484,665	16,238,427	27,576,875	82,841,189
Totals¹.....	106,321,772	106,960,920	162,784,883	171,932,118²

¹ The totals for manufactures involve duplicated amounts which were deducted in computing the total production for each province. The duplication arises from including in two places a number of industries which may be regarded as extractive or as manufacturing processes. The following are the amounts of the duplication by provinces: Prince Edward Island, gross \$1,644,839, net \$566,828; Nova Scotia, gross \$19,779,914, net \$10,266,305; New Brunswick, gross \$24,024,474, net \$13,057,609; Quebec, gross \$194,045,746; net \$109,372,323; Ontario, gross \$240,839,887, net \$134,263,996; Manitoba, gross \$21,292,322, net \$14,444,337; Saskatchewan, gross \$11,208,380, net \$6,081,191; Alberta, gross \$12,752,897, net \$7,388,612; British Columbia and Yukon, gross \$94,251,595, net \$46,254,262, Canada, gross \$619,840,054, net \$341,695,463. ² The value of production in Yukon, mainly in the mining and trapping industries (including similar industries of the N.W.T.), was \$2,996,649 gross and \$2,515,988 net in 1934.

4A.—Gross and Net Values of Production, Classified for each Province, by Industries 1935.

NOTE.—For Dominion totals, see Tables 1 and 2.

GROSS PRODUCTION.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	\$	\$	\$	\$	\$
Agriculture.....	13,620,895	28,593,542	26,202,622	195,759,545	346,181,757
Forestry.....	637,654	12,625,924	27,931,167	129,904,542	89,945,747
Fisheries.....	1,301,848	10,758,244	4,768,162	2,304,071	2,852,007
Trapping.....	2,713	425,086	80,080	1,050,591	1,604,537
Mining.....	Nil	21,965,963	2,798,654	77,500,047	220,799,576
Electric power.....	278,727	5,096,453	3,184,329	47,808,550	43,667,485
Construction.....	1,190,030	15,657,298	9,988,340	58,309,829	90,848,941
Custom and repair.....	195,914	2,619,419	1,564,063	17,556,467	43,110,934
Manufactures ¹	3,356,006	67,109,172	56,294,840	821,020,796	1,413,694,864
Totals¹.....	19,052,646	144,918,904	106,307,360	1,137,261,900	1,984,461,443

Industry.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon. ²
	\$	\$	\$	\$
Agriculture.....	63,447,987	164,290,293	141,446,777	40,322,681
Forestry.....	3,623,597	2,751,537	4,283,228	73,054,712
Fisheries.....	1,258,335	252,059	225,741	21,666,282
Trapping.....	968,003	1,080,760	1,064,968	2,600,593 ²
Mining.....	19,335,302	5,349,657	21,614,954	60,453,106 ²
Electric power.....	6,729,818	4,377,205	4,756,985	11,278,402
Construction.....	10,473,633	5,061,354	10,183,322	13,836,126
Custom and repair.....	8,656,290	6,853,889	7,257,507	9,295,257
Manufactures ¹	117,734,292	46,821,302	73,262,610	198,106,542
Totals¹.....	207,187,939	223,428,756	250,995,852	324,718,910²

For footnotes, see end of table, p. 221.

4A.—Gross and Net Value of Production, Classified for each Province, by Industries 1935—concluded.

NOTE.—For Dominion totals, see Tables 1 and 2.

NET PRODUCTION—concluded.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	\$	\$	\$	\$	\$
Agriculture.....	7,704,944	16,150,888	12,654,048	110,705,704	209,181,936
Forestry.....	563,574	9,190,760	18,550,461	84,258,587	57,605,866
Fisheries.....	899,685	7,852,899	3,949,615	1,947,259	2,852,007
Trapping.....	2,713	425,086	80,080	1,050,591	1,604,537
Mining.....	Nil	14,207,064	2,467,339	33,679,150	130,220,051
Electric power.....	238,354	4,332,290	3,024,999	47,805,074	43,645,644
Construction.....	666,790	9,688,391	5,834,831	32,859,784	50,649,333
Custom and repair.....	168,223	1,917,479	1,500,228	13,024,339	29,326,139
Manufactures ¹	1,362,405	30,995,130	27,594,016	393,805,691	659,051,124
Totals¹.....	11,059,670	84,186,607	61,184,408	607,222,088	1,050,064,179

Industry.	Manitoba.	Saskat- chewan.	Alberta.	British Columbia and Yukon. ²
	\$	\$	\$	\$
Agriculture.....	35,046,936	107,844,120	97,490,304	25,993,120
Forestry.....	2,774,146	2,465,864	3,796,138	48,294,950
Fisheries.....	1,258,335	252,059	225,741	15,190,254
Trapping.....	968,003	1,080,760	1,064,968	2,600,593 ²
Mining.....	9,040,591	2,869,351	16,738,472	29,359,250 ²
Electric power.....	6,657,635	3,616,251	4,572,180	11,230,651
Construction.....	5,083,452	2,772,833	5,524,813	7,735,062
Custom and repair.....	5,252,000	4,625,507	4,549,602	6,091,285
Manufactures ¹	47,349,314	16,976,149	28,912,220	86,196,093
Totals¹.....	102,442,524	136,374,259	155,098,953	187,087,995²

¹ The totals for manufactures involve duplicated amounts which were deducted in computing the total production for each province. The duplication arises from including in two places a number of industries which may be regarded as extractive or as manufacturing processes. The following statement gives the amounts of the duplication by provinces: Prince Edward Island, gross \$1,531,141, net \$547,018; Nova Scotia, gross \$19,932,197, net \$10,573,380; New Brunswick, gross \$26,504,897, net \$14,471,209; Quebec, gross \$213,952,538, net \$111,914,091; Ontario, gross \$268,244,405, net \$134,072,458; Manitoba, gross \$25,039,318, net \$10,987,888; Saskatchewan, gross \$13,409,300, net \$6,128,635; Alberta, gross \$13,100,240, net \$7,775,480; British Columbia and Yukon, gross \$105,894,791, net \$45,603,263; Canada, gross \$687,608,827, net \$342,073,422.

² The value of production in Yukon, mainly in the mining and trapping industries (including similar industries of the N.W.T.), was \$3,375,554 gross and \$3,110,950 net in 1935.

5.—Percentage of the Value of the Net Production in each Industry to the Total Net Production for each of the Provinces in 1934.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	p.c.	p.c.	p.c.	p.c.	p.c.
Agriculture.....	72.60	18.59	20.22	19.51	19.50
Forestry.....	5.40	11.87	30.66	13.57	5.39
Fisheries.....	9.47	10.01	6.64	0.40	0.23
Trapping.....	0.02	0.35	0.25	0.11	0.16
Mining.....	Nil	18.36	3.36	4.56	12.06
Electric power.....	2.36	5.44	5.25	8.18	4.48
Construction.....	1.59	9.43	7.04	4.11	6.31
Custom and repair.....	1.55	2.27	2.53	2.19	2.75
Manufactures, <i>n.e.s.</i>	7.01	23.68	24.00	47.37	49.12
Totals.....	100.00	100.00	100.00	100.00	100.00
Totals, Manufactures (Percentages to Grand Totals of Net Production)...	12.58	37.07	47.57	66.47	62.95

5.—Percentage of the Value of the Net Production in each Industry as the Total Net Production for each of the Provinces in 1934—concluded.

Industry.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon. ¹	Canada.
	p.c.	p.c.	p.c.	p.c.	p.c.
Agriculture.....	42.78	73.42	66.97	14.72	26.51
Forestry.....	2.02	2.07	2.10	25.46	9.32
Fisheries.....	1.38	0.21	0.15	8.87	1.52
Trapping.....	1.01	1.20	0.70	1.46 ¹	0.39
Mining.....	6.45	2.19	9.03	15.16 ¹	9.36
Electric power.....	5.94	3.24	2.70	6.21	5.48
Construction.....	3.40	4.05	3.30	3.46	5.17
Custom and repair.....	5.00	4.12	2.65	3.38	2.80
Manufactures, <i>n.e.s.</i>	32.02	9.50	12.40	21.28	39.45
Totals.....	100.00	100.00	100.00	100.00¹	100.00
Totals, Manufactures (Percentages to Grand Totals of Net Production)...	45.60	15.18	16.94	48.18	54.75

¹ Includes the trapping and mining industries of the Northwest Territories.

5A.—Percentage of the Value of the Net Production in each Industry to the Total Net Production for each of the Provinces in 1935.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	p.c.	p.c.	p.c.	p.c.	p.c.
Agriculture.....	69.67	19.18	20.68	18.23	19.93
Forestry.....	5.10	10.92	30.31	13.88	5.49
Fisheries.....	8.13	9.33	6.46	0.32	0.27
Trapping.....	0.02	0.50	0.13	0.17	0.15
Mining.....	Nil	16.88	4.03	5.55	12.40
Electric power.....	2.16	5.15	4.94	7.87	4.16
Construction.....	6.03	11.51	9.54	5.41	4.82
Custom and repair.....	1.52	2.28	2.45	2.14	2.79
Manufactures, <i>n.e.s.</i>	7.37	24.25	21.46	46.43	49.99
Totals.....	100.00	100.00	100.00	100.00	100.00
Totals, Manufactures (Percentages to Grand Totals of Net Production)...	12.32	36.82	45.10	64.85	62.76

Industry.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon. ¹	Canada.
	p.c.	p.c.	p.c.	p.c.	p.c.
Agriculture.....	34.21	79.09	62.85	13.89	26.01
Forestry.....	2.71	1.81	2.45	25.82	9.50
Fisheries.....	1.23	0.18	0.15	8.11	1.44
Trapping.....	0.94	0.79	0.69	1.39 ¹	0.37
Mining.....	8.83	2.10	10.79	15.69 ¹	9.96
Electric power.....	6.50	2.65	2.95	6.00	5.22
Construction.....	4.96	2.03	3.56	4.13	5.05
Custom and repair.....	5.13	3.39	2.93	3.26	2.78
Manufactures, <i>n.e.s.</i>	35.49	7.96	13.63	21.71	39.67
Totals.....	100.00	100.00	100.00	100.00¹	100.00
Totals, Manufactures (Percentages to Grand Totals of Net Production)...	46.22	12.45	18.64	46.07	53.96

¹ Includes the trapping and mining industries of the Northwest Territories.

CHAPTER VIII.—AGRICULTURE.

Agriculture, including stock raising and horticulture, is the chief single industry of the Canadian people, employing, in 1931, 28.7 p.c. of the total gainfully occupied population and 33.9 p.c. or over one-third of the gainfully occupied males. In addition, it provides the raw material for many Canadian manufactures, and its products in raw or manufactured form constitute a very large percentage of Canadian exports. For a statement of the occupied and the available agricultural lands in Canada, see p. 60 of this volume.

This chapter treats of current governmental activities in connection with agriculture, including those of the Dominion and Provincial Experimental Stations. Statistics of agriculture follow, including agricultural revenue and wealth, field crops, farm live stock and poultry, dairying, fur farming, fruit, special crops, farm labour and wages, prices, miscellaneous, and, since Canadian exports of agricultural commodities are sold in the world market, a review of world statistics of agriculture, compiled from the publications of the International Institute of Agriculture.

Section 1.—The Government in Relation to Agriculture.

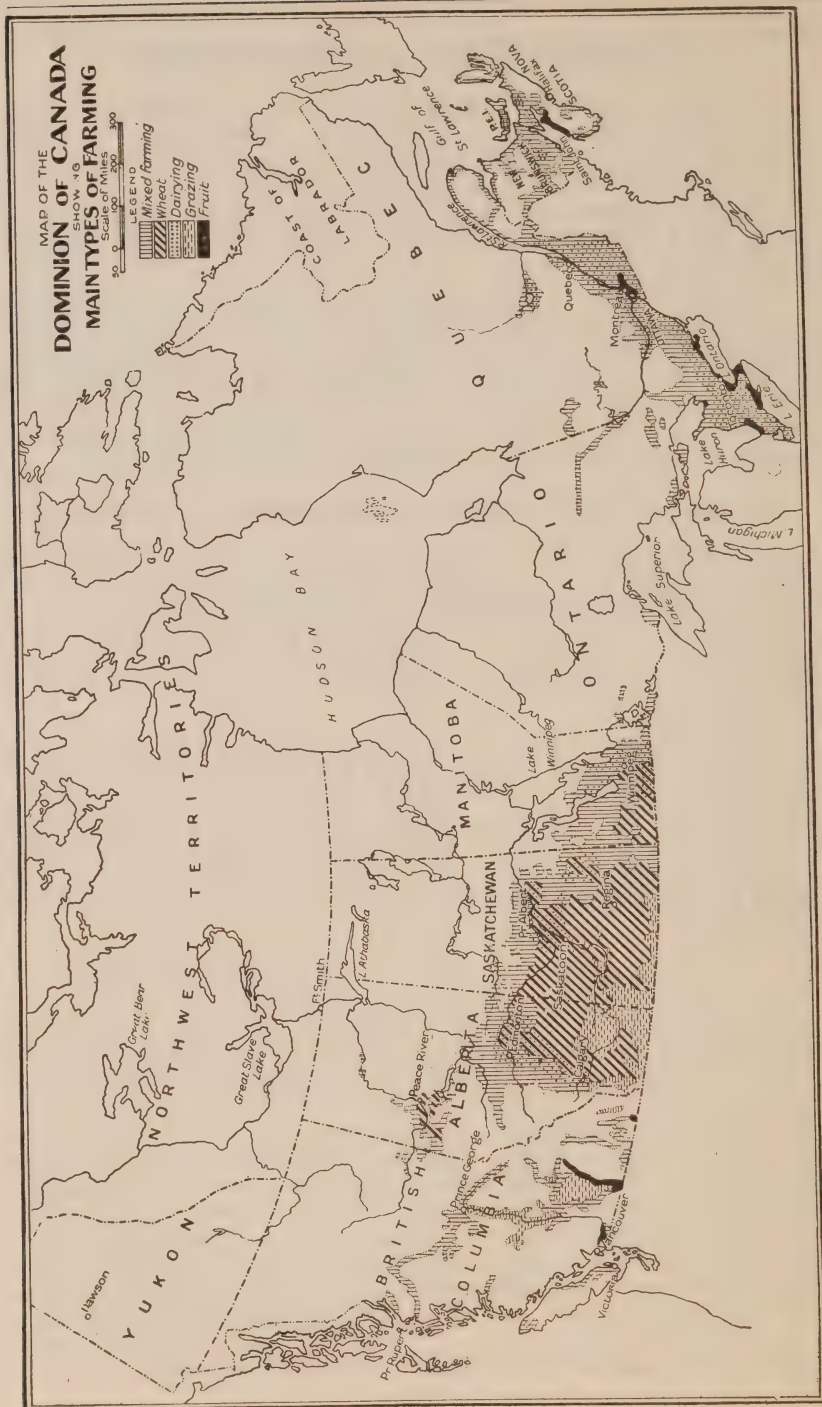
It is provided in Section 95 of the British North America Act that "in each province the Legislature may make laws in relation to agriculture in the province"; it is also "declared that the Parliament of Canada may from time to time make laws in relation to agriculture in all or any of the provinces; and any law of the Legislature of a province relative to agriculture . . . shall have effect in and for the province as long and as far only as it is not repugnant to any Act of the Parliament of Canada".

As a result of this provision, there exist at the present time Departments of Agriculture, with Ministers of Agriculture at their heads, both in the Dominion and in each of the nine provinces, though in two provinces the portfolio of agriculture is combined with one or more other portfolios in the hands of a single Minister. A short sketch of the functions of the Dominion Department was published at pp. 212-223 of the 1936 Year Book, and an outline of agricultural progress in Canada and the Dominion Experimental Farms System appeared at pp. 221-228 of the 1937 Year Book.

Subsection 1.—The Prairie Farm Rehabilitation Program.*

The need for the Prairie Farm Rehabilitation Program arose from the severe conditions of drought and soil drifting which have been experienced almost continuously since 1929 in southwestern Manitoba and the southern parts of Saskatchewan and Alberta. These conditions have resulted in serious reductions in crop yields and repeated crop failures. As the type of farming in this area is limited by the semi-arid climate to grain production, principally grain for export, these reduced yields, coupled with the extremely low grain prices which prevailed from 1930 to 1935, have entailed enormous economic losses and considerable hardship to the agricultural population. Very large governmental expenditures have been necessary to relieve actual want, while the disparity between income and capital investment has resulted in drastic debt and tax adjustments and seriously interfered with credit facilities. The nation-wide repercussions of this agricultural

* Prepared under the direction of Dr. E. S. Archibald, Director of the Dominion Experimental Farms, by William Dickson, Esq., Field Husbandry Division, Central Experimental Farm, Ottawa.



MAIN TYPES OF FARMING IN CANADA.

crisis in the Prairie Provinces led to the inauguration by the Dominion Government of the rehabilitation program.

The Prairie Farm Rehabilitation Act was passed by the Parliament of Canada in 1935 to provide for the improvement of agricultural conditions in those parts of the Prairie Provinces which in recent years have suffered severely from drought and soil drifting. The principal object of the rehabilitation program inaugurated by this Act is to introduce measures in the affected areas to control these conditions and to establish agriculture on a sound economic basis. These measures include the improvement of cropping and cultural practices, the conservation of surface water supplies, and necessary adjustments in land utilization. Each of these is dealt with under the headings presented below. Active co-operation between the Government and the farmers, rather than the provision of relief, is an important feature of this program.

The Act is administered by the Dominion Minister of Agriculture, operating through the Dominion Experimental Farms and other branches of the Department of Agriculture. Co-operating agencies include the governments of the three Prairie Provinces and various services of the Dominion Government. Appropriations under the Act have amounted to \$1,250,000 for the fiscal year 1935-36, \$1,184,420 for 1936-37 and \$2,000,000 for 1937-38.

CULTURAL WORK.

Aside from the lack of precipitation which is beyond human control, and which greatly reduces crop yields, soil drifting is the most serious problem encountered in the Prairie Provinces during periods of drought. Fortunately, methods of controlling this menace are available, the success of which is enhanced by their widespread adoption throughout the affected area. For this reason a very considerable amount of the cultural work under the rehabilitation program is directed to the control of soil drifting.

Soil Drifting.—The prevalence of soil drifting during dry years in the Prairie Provinces is caused, in large measure, by the very extensive practice of summer-fallowing. Under the average climatic conditions which prevail in the southern parts of the Prairie Provinces, the amount of precipitation received is not sufficient to produce a profitable crop each year on the same land. This fact has led to the practice of summer-fallowing, whereby part of the land is kept bare of vegetation by cultivation during one year in order that any rainfall received may be stored to augment moisture supplies for crop production in the succeeding year. As this practice exposes a large proportion of the crop land in a pulverized condition to the erosive action of high winds, soil drifting is apt to occur on summer-fallow during dry years.

The attack on soil drifting under the rehabilitation program involves the introduction of improved methods of summer-fallowing. One of the most effective methods of soil-drifting control is strip farming, which consists of dividing large fields into alternate narrow strips of crop and summer-fallow. These strips, which may vary in width from 8 to 16 rods, are run at right angles to the direction of the prevailing strong winds. Drifting, which may start on the fallow strips, is prevented from spreading by the crop or stubble on the adjacent strips. In this manner the cumulative effect of drifting on large fields is avoided. Strip farming has been practised successfully for many years in parts of southern Alberta, and its use throughout the drought area is being widely adopted.

In the cultivation of fallow land it is desirable to leave as much stubble and other "trash" on the surface as possible, and to produce a rough cloddy tilth, in order to reduce susceptibility to drifting. Good trash cover may be secured by shallow cultivation; in this respect, the "ploughless fallow" in which the fallow and subsequent seed bed is cultivated without ploughing, is being advocated and is coming into wide use. Rough tilth is secured by the same method, and by avoiding the use of implements which produce extreme pulverization. A combination of surface cultivation and strip farming is proving useful in controlling soil drifting. In some cases cover crops of spring grain sown in the late summer are used to prevent drifting. However, considerable difficulty is experienced in getting stands of these crops, particularly in dry years or when grasshoppers are numerous. Various emergency methods are also used, such as spreading straw on small areas of incipient drifting and cultivating or ridging land at intervals across a field.

Where the control of soil drifting cannot be effected by any of the foregoing methods, as on some areas of sandy land, regrassing may become necessary. Owing to the difficulty of securing a stand of grass on land which is subject to periodical drifting, it is frequently necessary to provide some vegetative protection for the soil. Cover crops of grain, such as fall rye, are used for this purpose. Grass seed of the desired species, usually crested wheat or brome grass, is seeded when sufficient protection has developed to check drifting. Sometimes several attempts at regrassing are necessary in order to secure the desired result.

Cultural Rehabilitation Work by the Experimental Farms in Association with Local Bodies.—The development of cultural work under the rehabilitation program is supervised from the Dominion Experimental Farms located in the drought area. As such experimental farms have been in operation at Brandon, Man., and Indian Head, Sask., for over 50 years, and at Scott, Sask., Swift Current, Sask., and Lethbridge, Alta., for many years, they form ideal centres for the spread of rehabilitation work through the agencies described below.

District Experiment Sub-Stations.—These are essentially sub-stations of the Dominion Experimental Farms, established for the purpose of undertaking experimental work and illustrating methods of crop production, suitable for various districts. Comprising usually one section of land, these sub-stations are private farms operated under the supervision of the local experimental farm. In addition to field work with rotations and soil-drifting control practices, these sub-stations serve as experimental demonstrational points for farm gardens, shelterbelts, and various other farmstead improvement projects. Since the inauguration of the program, 47 sub-stations have been established at strategic points.

Reclamation Stations.—Investigations to determine the most economical methods of dealing with marginal land on which crop production has been abandoned due to soil drifting, are in progress at reclamation stations located at Melita, Man., Mortlach, Sask., Cadillac, Sask., and Woodrow, Sask. Smaller reclamation projects are in progress at many points where drifting has been severe including over 40 demonstrations of the best methods of establishing grass cover on light land.

Agricultural Improvement Associations.—In order to promote the widespread adoption of rehabilitation measures, some means of establishing contact with the farmers and of enlisting their co-operative support, is essential. This has been effected through the organization of farmers into agricultural improvement associations, the purpose of which is to secure united community action on drought

and soil-drifting problems. By the end of 1937 some 97 of these associations had been formed, with a total membership of over 12,000, or roughly about one-tenth of the farmers in the drought area. Each association receives some small financial assistance for operating expenses, and members may receive small supplies of grass seed, trees, and other materials.

Agricultural improvement associations have proved very effective in securing the widespread adoption of cultural practices, such as strip farming, which are useful in combating soil drifting. A noteworthy feature of this work has been the assistance given by officers of associations to the Dominion Experimental Farms in organizing large-scale emergency operations for the control of soil drifting in certain dangerous areas, over 15,000 acres having been covered in southwestern Saskatchewan alone during 1937.

Tree Planting.—The value of shelterbelts of trees and shrubs for the protection of farm buildings and gardens against high winds on the open prairie, is generally recognized, and free planting stock for this purpose has been supplied to prairie farmers by the Dominion Government since 1901. Under the rehabilitation program some special assistance is given to farmers in planting farm-home shelterbelts, and model plantations are being established on district experiment sub-stations for demonstration purposes.

The difficulty of maintaining large plantations in a region which is naturally treeless by reason of insufficient rainfall, however, has prevented any widespread use of shelterbelts for field-crop protection. With the object of determining definitely the effect of large-scale shelterbelts on crop production, especially as regards the control of soil drifting and the conservation of moisture, field-crop shelterbelt associations have been organized among farmers at four different points in the drought area, namely: Lyleton, Man.; Conquest, Sask.; Aneroid, Sask.; and Ribstone, Alta. In each of these associations the members plant shelterbelts around their fields covering an area of approximately one township. A similar municipal project for bluff planting at Kindersley, Sask., is also being assisted. As every possible effort is being made to ensure the success of these projects, the results secured will have a decisive influence on future afforestation policies in the prairies.

Supervision of the foregoing activities and seedling supplies are furnished by the Forest Nursery Stations of the Dominion Experimental Farms, located at Indian Head, Sask., and Sutherland, Sask.

Soil Surveys.—With the object of determining the nature, location, and extent of different types of soil in the Prairie Provinces, soil surveys have been conducted by the provincial universities for a number of years, with financial assistance from the Dominion Experimental Farms. Since 1935 this work has been paid for from rehabilitation funds, in order to accelerate the mapping of the drought area. By the end of 1937 all of the drought area in Manitoba and Saskatchewan, and more than half of the area in Alberta, had been covered by a reconnaissance survey.

Soil Research.—Investigations into the fundamental principles of crop production under semi-arid conditions are in progress at the new Soil Research Laboratory, Dominion Experimental Station, Swift Current, Sask. Special attention is given in this work to soil moisture problems, soil-drifting control and soil fertility. A certain amount of soil research work is also being conducted in co-operation with the universities of each of the Prairie Provinces.

WATER DEVELOPMENT.

The development of surface-water resources for agricultural use is a major rehabilitation activity which has already resulted in substantial benefits to farmers and ranchers in the drought area. The object of this work is to provide supplies of water throughout the year by storing spring run-off in dugouts and dams for domestic, stock-watering, and irrigation purposes. The principal value of this type of development is to enable live-stock production in areas where it would be otherwise impossible. This work is supervised by the Water Development Committee with headquarters at Regina, Sask. The personnel of this Committee includes representatives of the Dominion Department of Agriculture and of the water-rights branches of each of the Prairie Provinces.

Under the rehabilitation program, two types of projects are being constructed—small projects on private farms and large projects for community use. Small projects include excavations known as dugouts, dams on small streams, and irrigation works, in the construction of which farmers receive free engineering services, and financial assistance in proportion to the amount of work done. The basis of financial assistance is $4\frac{1}{2}$ cents per cubic yard of earth moved, plus additional amounts for rock work and the purchase of materials. Maximum assistance for the different types of small projects are: \$75 per dugout, \$150 per stock-watering dam, and \$350 per irrigation project. Where two or more farmers co-operate in a project, the maximum may be increased to \$500. Government assistance for large projects is determined for each project on its merits, sometimes amounting to the full cost of construction.

Applications from the drought area for assistance with water development are received by the Water Development Committee. Small projects, when approved, are referred to the appropriate provincial member of the Committee for final authorization. Engineering and financial assistance for these projects are provided from rehabilitation funds. Large projects are passed through the Dominion Department of Agriculture for the Minister's approval.

Progress with Small Water Development Projects.—From the inauguration of the program in 1935 to Jan. 15, 1938, a total of 11,392 applications for assistance with small projects was received. During the same period 4,285 small projects were reported as completed, comprising 2,541 dugouts, 1,414 stock-watering dams, and 330 irrigation projects. The irrigable area represented by the 330 small irrigation projects is approximately 12,000 acres. Most of this area will be used in growing supplies of feed for live stock.

Progress with Large Water Development Projects.—Large projects include the construction of storage dams and irrigation works for incorporated bodies, such as rural municipalities and irrigation districts. In some cases assistance has been provided for repair and extension work on existing irrigation projects, where the discontinuance of water supplies would have caused serious hardship. The basic principle governing the selection of large projects is to secure a maximum of benefit with a minimum of cost.

In the development of large irrigation projects full advantage is taken of the experience gained in the irrigation districts of southern Alberta since the opening of the present century. The bulk of new irrigation is intended for the production of forage crops, to provide dependable supplies of feed to supplement grazing in range areas. The extensive production of grain on irrigated land is not contemplated.

Since the beginning of the program several large irrigation projects have been completed. These include works for the irrigation of 6,000 acres at Val Marie, Sask., 3,900 acres at Eastend, Sask., 900 acres at Middle Creek, Sask., and 1,500 acres at Adams Lake, Sask. The foregoing projects will eventually form units in a larger irrigation system on the southern watershed of the Cypress hills covering 20,000 acres of irrigable land, with a main reservoir of 70,000 acre-feet capacity now in construction on Cypress lake. On the northern watershed of the Cypress hills, the Downie Lake irrigation project, also in course of construction, will provide irrigation water for about 10,000 acres. It is important to note that the development of irrigation in the Cypress Hills district will materially stabilize live-stock production on over 3,000,000 acres of range land.

Construction of works have also been completed for the irrigation of 3,600 acres at Wildhorse, Alta., 3,600 acres at Mountain View, Alta., 6,000 acres at Moose Mountain Lake, Sask., and 3,500 acres along the Souris river north of Estevan, Sask. A large number of smaller community irrigation schemes have been completed or are in course of construction.

In the Eastern Irrigation District of Brooks, Alta., existing facilities have been extended to irrigate about 10,000 acres of land near Tilley and further extensions to about 25,000 acres in the Rolling Hills district are in progress.

Altogether, new irrigation works under the rehabilitation program, including large and small projects completed or in progress at the end of 1937, represent a total irrigable area of over 100,000 acres. In addition, extensive repairs have been made to the works of the Canada Land and Irrigation Project to ensure continuance of water supplies to some 45,000 acres of irrigated land near Vauxhall, Alta.

Construction of large community storage dams for stock-watering purposes has been completed or is in progress at many points in the drought area.

LAND UTILIZATION.

During the period of agricultural settlement in the Prairie Provinces some areas of marginal and submarginal land were broken for crop production. Some of this land was subsequently abandoned, but a considerable acreage is still under cultivation with little prospect of producing profitable crops. To rectify this condition, adjustments in land utilization are being made on the basis of information gained through the Dominion Experimental Farms, soil surveys, and economic surveys. The most important development in this respect is the creation on submarginal land of community and reserve pastures.

Community Pastures.—These pastures, which vary in area from about 5,000 to nearly 50,000 acres each, are established on submarginal land in the vicinity of somewhat better farm land. Each pasture is being fenced, supplied with stock-watering facilities, and, where necessary, seeded to grass. Grazing privileges, under government supervision, will be accorded to operators of farms in the vicinity. In this manner the usefulness of certain areas will be increased, and their liability to soil drifting removed.

By Dec. 31, 1937, some 47 areas in Saskatchewan, totalling 503,710 acres, and 8 areas in Alberta, totalling 595,840 acres, had been tentatively selected as community pastures. By the same date, the organization of 16 pastures in Saskatchewan with a total of 175,900 acres was practically completed.

Reserve Pasture.—Another development in land utilization, somewhat similar to the foregoing, is the proposed establishment of large reserve pastures. One object of this phase of the program is to prevent uncontrolled agricultural resettlement. Another is to provide protected grazing areas into which stock might be moved in the event of future droughts. Three such areas totalling 3,064,320 acres have been tentatively selected in southwestern Saskatchewan in connection with irrigation developments south and north of the Cypress hills.

SIGNIFICANCE OF THE REHABILITATION PROGRAM.

Certain significant facts in connection with the rehabilitation program described above are worthy of notice. Recent drought conditions have been unprecedented in so far as prairie agriculture is concerned, but there is evidence that similar dry periods have occurred at long intervals prior to the settlement of the great plains. The adoption of whatever cropping practices will best enable farmers to withstand periodic droughts is, therefore, a major phase of rehabilitation.

Periodic droughts are inevitable, but their adverse effects can be minimized by the application of measures based on experience and investigation.

Subsection 2.—Provincial Departments of Agriculture.*

Prince Edward Island.—The Department of Agriculture is presided over by a Minister, and the staff consists of a Deputy Minister and live-stock superintendent, a superintendent of women's institutes, a dairy superintendent, a field promoter, and a field man for the fox industry. Assistance is given in co-operative marketing, promoting the live-stock industry and encouraging exhibitions, the formation of boys' and girls' clubs and the welfare of agriculture generally.

Nova Scotia.—Agriculture in the province of Nova Scotia is administered by the Department of Agriculture, with the Head Office (Minister's Office) and those of the Director of Marketing and of the Land Settlement Board situated in Halifax. Many of the technical officials are situated at the Agricultural College and Farm, Truro, and other Divisions of the Department include: extension service; agricultural societies, associations, and exhibitions; dairying; poultry; live stock; entomology and botany; apiculture; and women's institutes.

New Brunswick.—The branches of the Department of Agriculture of New Brunswick are as follows: (1) live-stock and agricultural societies; (2) dairying; (3) herd improvement; (4) soils and crops; (5) poultry; (6) horticulture; (7) women's institutes; (8) agricultural representatives; (9) industry, immigration, and farm settlement; (10) elementary agricultural education; (11) beekeeping.

Quebec.—The administration of agricultural policies is entrusted to a number of services and sections as follows: extension work, which deals with all problems faced by the 98 agricultural county agents; rural economy; animal husbandry; health of animals; plant protection; agricultural education; domestic science; field husbandry; publicity; and administration. The Chief Technical Adviser is directly responsible to the Deputy Minister, who remains the main technical authority of the Department. Each service is divided into divisions dealing with minor problems. There are also many other activities such as the Quebec Farm Credit Bureau, agricultural merit competition, provincial dairy school, provincial handicraft school, etc. There is, therefore, for any kind of agricultural activity, a cor-

* For publications of provincial Departments of Agriculture, see in the index the entry "Publications of Provincial Governments".

responding administrative service where accurate information may be obtained by interested persons.

Ontario.—The Ontario Department of Agriculture includes the following branches: statistics and publications; agricultural and horticultural societies; live stock; women's institutes; dairy; fruit; agricultural representatives; crops, seeds, and weeds; Commissioner of Marketing; Commissioner of Agricultural Loans; and the Milk Control Board. The Department is responsible for the administration of the Ontario Agricultural College, the Ontario Veterinary College, the Kemptville Agricultural School, the experimental farms at Guelph, Ridgerton, and Vineland, and demonstration farms at New Liskeard and Hearst.

Manitoba.—The Manitoba Department of Agriculture includes the following services and branches: agricultural extension, dairying, publications, statistics and weeds, live stock, the Debt Adjustment Board, and the Registrar of Co-operative Associations.

The Agricultural Extension Branch aids field-crop production, horticulture, beekeeping, poultry raising, suppression of insect outbreaks, boys' and girls' club work, and various home-making projects. It also directs the activities of rural agricultural representatives and supervises the work of agricultural societies, horticultural societies, and women's organizations. The Dairy Branch grades all cream supplied to creameries, supervises the activities of creameries and cheese factories and gives general support to the dairy industry. The Live Stock Branch licenses stallions and conducts projects and administers policies through which encouragement is given to the production of better types of animals.

Saskatchewan.—The Department of Agriculture includes branches dealing with: the agricultural representative service, live stock, field crops, dairying, statistics, co-operation and markets, and land utilization. There is also a bee division. The Live Stock Branch provides the organization for examining and licensing stallions, purchasing and selling cattle, sheep, and hogs to farmers on cash and credit terms in the pure-bred sire areas (areas created under statutory authority in order to eliminate undesirable sires and improve the quality of live stock), and registering brands for live stock. The poultry industry is promoted through a flock-culling service, a turkey-grading service and an approved hatchery policy. The Field Crops Branch aids in promoting good cropping and tillage practices as well as encouraging the use of good quality seed of cereal and forage crops and provides control measures for suppressing insect and weed pests. The Dairy Branch directs the grading of cream at all the creameries, promotes herd improvement through cow testing and administers the provisions of the Dairy Products Act with respect to licensing creamery operators, cream graders and testers, and the bonding of creameries. The Statistics Branch, in co-operation with the Dominion Bureau of Statistics, maintains a crop-reporting service and gathers annual data respecting crops and live stock of the province. The Co-operation and Markets Branch grants charters to co-operative associations under the Co-operative Associations Act and to credit unions under the Credit Union Act, promotes co-operative activities including live-stock shipping and poultry marketing, licenses poultry dealers under the Live Stock and Live Stock Products Act, and publishes a fortnightly news letter dealing with co-operation and marketing. Under the Agricultural Representative Service, as established, the province is divided into districts where qualified men carry on promotional and educational work. The Apiary Division registers all beekeepers, and promotes better management and practices. Agricultural

societies are organized by, and grants paid through, the Department, but direction of the activities of societies is centred in the College of Agriculture of the University of Saskatchewan. The Land Utilization Board, composed of representatives of several interested departments of government, facilitates the withdrawal of lands unsuitable for such use from arable farming.

Alberta.—The main services of this Department are rendered through its various branches to the live-stock, grain-growing, dairy, and mixed-farming industries. Fairs and institutes are encouraged; rural women's organizations are assisted through the Women's Bureau; district agriculturists are located at 10 points; 2 schools of agriculture are maintained; crop reports and statistical information are prepared; short courses and field days are conducted. Some phases of agriculture receiving more recent and increased attention are: development of apiculture; encouragement of the poultry industry; more effective weed control; production and sale of registered seed; increase in forage crops and grasses; junior activities such as grain and stock clubs and school fairs; encouragement of beef-feeding associations.

British Columbia.—The Department of Agriculture deals with all matters of provincial concern connected with farming in its several phases. It consists of three main divisions, namely:—

(1) The General Administration Division is responsible for the general direction of agricultural policies; the administration of legislative measures affecting agriculture; the collection of agricultural statistics; the preparation of agricultural and horticultural displays for showing at provincial, national, and international exhibitions and assistance to fall fairs. It also distributes departmental publications; supervises soil-survey work; apiary inspection; junior club projects; farmers' and women's institutes. The Markets Branch is included in this Division.

(2) The Animal Industry Division has direct supervision over general live-stock work in the province, including live-stock promotion and improvement; brand inspection; nutritional studies; animal parasite control, and contagious diseases of animals control. This Division consists of live-stock, veterinary, dairy and poultry branches as well as the Brand Inspection Service. A pure-bred sire purchase policy is administered under which it is possible for farmers' institutes to purchase pure-bred sires under special financial arrangements with the Department. In the Dairy Branch there is a herd improvement service operating through Cow Testing Associations; official lists are maintained of pure-bred dairy sires which have five or more daughters with production records.

(3) The Plant Industry Division includes horticulture, plant pathology, entomology, and field-crop branches. Services of these branches include the general direction of fruit and vegetable production and various surveys dealing with orchards, small fruits and bulb acreages, as well as greenhouse areas; the suppression or control of insect pests and plant diseases; inspection and control of noxious weeds; supervision of Field Crop Union activities; local and provincial seed fairs and educational work connected with horticulture and field-crop production.

The Extension Service of the provincial Department of Agriculture maintains District Horticulturists, District Agriculturists, and District Field Inspectors at suitable points. These extension officials feature either animal industry or plant industry, depending upon the predominating type of farming carried on in the several districts. Junior Club projects are organized and supervised by extension officials in practically all areas of the province; there are now approximately one hundred clubs participating.

The detailed survey of orchard soils in the Okanagan valley which was started in 1931 as a joint undertaking between the Dominion Experimental Farms and the provincial Department of Agriculture, has been followed by reconnaissance surveys of lands adjacent to the areas formerly examined. Soil maps and soil reports covering more than half a million acres in the Lower Fraser valley and a similar area in the Okanagan valley are in the course of preparation.

Details of the work of the Feed Standards Board appointed by the provincial Minister of Agriculture and of the Pasture Committee were given on p. 226 of the 1936 Year Book.

Subsection 3.—Provincial Agricultural Colleges and Experimental Stations.

Under the above heading, outlines of the work done at provincial agricultural colleges and experimental stations were given by provinces at pp. 198–203, inclusive, of the 1930 Year Book. The interested reader is referred to that volume, and to the following provincial publications, for information concerning courses and programs of work at these institutions:—

Nova Scotia.—Annual Report of the Department of Agriculture for Nova Scotia; Calendar of the College of Agriculture, Truro, N.S.

Quebec.—Announcement of Macdonald College, Macdonald College, Que., and the prospectuses and annual announcements of the College of Agriculture, Ste. Anne de la Pocatière, and the Oka Agricultural Institute and Veterinary School, La Trappe, Que.

Ontario.—Annual Report of the Ontario Agricultural College and Experimental Farm, Guelph, Ont.

Manitoba.—Annual Report of the Manitoba Agricultural College, Winnipeg, Man.

Saskatchewan.—Annual Report of the College of Agriculture, University of Saskatchewan, Saskatoon, Sask.

Alberta.—Annual Report of the College of Agriculture, University of Alberta, Edmonton, Alta.

British Columbia.—Annual Report of the Faculty of Agriculture, University of British Columbia, Vancouver, B.C.

Section 2.—Statistics of Agriculture.*

Census Statistics.—In addition to the statistics collected annually, which are the subject of this section, valuable information is published following each decennial census. The total number of farms, their tenure, acreage, value, mortgage debt, farm population, farm machinery and facilities, etc., were treated at pp. 295–301 of the 1934–35 Year Book. A summary presentation of agricultural development since 1871 was given in Subsection 9, pp. 270–273 of the 1936 Year Book.

Crop-Reporting Service.—The voluntary crop-reporting service of the Dominion Government, which has been in operation since 1908, has for its object the issue of accurate, timely, and independent reports on crop conditions throughout the

* Revised under the direction of Dr. T. W. Grindley, Chief of the Agricultural Branch, Dominion Bureau of Statistics. This Branch is concerned with both primary and secondary statistics of agriculture, including statistics of the production and distribution of agricultural commodities. The primary statistics relate mainly to the reporting of crop conditions, crop and live-stock estimates, values of farm lands, wages of farm labour, and monthly and annual prices received by farmers for their products. The secondary statistics relate to the marketing of grain and live stock, and reports on the milling and sugar industries and cold-storage holdings. A list of the publications of this Branch is given in Chapter XXIX, Section I, under "Production".

Dominion; first, in the interests of the general body of Canadian farmers; secondly, for the information and guidance of other interests allied to and dependent upon agriculture (interests represented by statesmen, economists, bankers, grain dealers, transportation agents, and others); and thirdly, for reporting to the Institute of Agriculture at Rome (to which Canada is an adhering country) in return for reports on the production of other countries and of world totals which influence prices and consequently affect the interests of Canada. Supplementing the monthly reports from crop correspondents, the Bureau issues telegraphic crop reports utilizing the services of agriculturists throughout the Dominion. For the Prairie Provinces, these are issued every week from the latter part of May to the end of August, while the reports on a Dominion-wide basis are issued every two weeks during the same period. The program of reports for 1938-39 is given in the *Monthly Bulletin of Agricultural Statistics*, January, 1938, pp. 59-61, and is also issued as a special leaflet.

Annual Statistics.—In addition to the crop-reporting service, statistics of the areas under field crops and of the numbers of farm live stock are collected. These arrangements have been in force since 1918, and are carried out by the Dominion Bureau of Statistics in co-operation with the Provincial Governments. The statistics are secured by schedules which are at present returned by about one-fifth of the farmers of Canada. They form the basis of the estimates for the whole of Canada. The results for wheat, oats, barley, rye, and flaxseed in the three Prairie Provinces are ready for publication in August, while the results for the remaining crops and for the numbers of farm live stock are published in November and December. The areas, thus determined, when multiplied by the average yields per acre as reported by crop correspondents, form the basis of the total estimated production for each crop.

The June schedule covers the areas sown to field crops, the numbers of live stock and poultry on hand, and breeding and marketing intentions with regard to live stock and poultry. The December schedule contains practically the same items with the exception of field-crop areas.

The schedules are distributed and collected through the agency of the rural schools in New Brunswick, Quebec, Ontario, Manitoba, and Saskatchewan, while in Prince Edward Island, Nova Scotia, Alberta, and British Columbia the schedules are sent direct to the farmer through the mail.

Monthly Bulletin of Agricultural Statistics.—Originally established in 1908 as the "Census and Statistics Monthly", but changed to its present title in April, 1917, this publication is now in its thirty-first year. It is the official organ not only for the monthly crop reports and annual statistics previously described, but also for statistics of dairying, eggs, fruit, apiculture, hops, tobacco, maple products, sugar beets, beet sugar, flax fibre, clover and grass seeds, visible supplies, prices, values, foreign agriculture, and other subjects in considerable variety.

Presentation of Agricultural Statistics.—In the current edition of the Year Book, statistics of agriculture are presented under the following headings: (1) value of agricultural production and of farm capital; (2) acreages, yields, and values of principal field crops; (3) farm live stock and poultry; (4) dairying; (5) horticulture; (6) special agricultural crops; (7) farm labour and wages; (8) prices

of agricultural produce; (9) agricultural statistics of the census; (10) miscellaneous agricultural statistics; and (11) international agricultural statistics.

Subsection 1.—Value of Agricultural Production and of Farm Capital.

Value of Agricultural Production.—Table 1 shows, under principal headings, the gross agricultural revenue of Canada, by provinces, for the years 1932 to 1936. It is important to note that the figures represent gross values, as no distinction is made between crops used as materials for other kinds of production, such as the feeding of live stock, and no allowance is made for the costs of production. The total revenue for 1936 shows an increase of \$112,084,000 or nearly 12 p.c. as compared with 1935.

1.—Estimated Gross Value of Agricultural Production in Canada, Itemized by Provinces, 1932-36.

NOTE.—Preliminary figures for 1937 and revised figures for 1933-36 will be found in the Monthly Bulletin of Agricultural Statistics, March, 1938.

Item.	1932.	1933. ¹	1934. ¹	1935. ¹	1936. ¹
	\$'000	\$'000	\$'000	\$'000	\$'000
Canada—					
Field crops.....	452,527	453,598	549,080	511,873	599,421
Farm animals.....	65,185	89,063	99,438	120,078	130,886
Wool.....	1,093	2,005	1,899	2,232	2,783
Dairy products.....	159,074	170,829	183,791	192,410	208,238
Fruits and vegetables.....	32,157	33,208	43,531	48,678	42,821
Poultry and eggs.....	42,078	38,060	45,515	50,434	53,236
Fur farming.....	3,284	4,062	4,534	5,516	6,399
Maple products.....	2,706	2,059	3,040	3,522	3,714
Tobacco.....	6,088	6,531	7,232	10,763	9,185
Flax fibre.....	170	159	250	321	298
Clover and grass seed.....	962	1,362	2,010	1,686	2,257
Honey.....	1,470	2,010	2,245	2,027	2,386
Totals.....	766,794	802,946	942,565	949,540	1,061,624
Prince Edward Island—					
Field crops.....	6,737	8,841	9,054	8,561	10,311
Farm animals.....	715	945	917	1,369	1,429
Wool.....	24	42	36	33	45
Dairy products.....	1,446	1,505	1,407	1,444	1,594
Fruits and vegetables.....	98	79	136	154	172
Poultry and eggs.....	611	682	669	825	823
Fur farming.....	521	623	762	863	1,000
Clover and grass seed.....	9	13	15	10	17
Honey.....	1	1	1	1	1
Totals.....	10,162	12,731	12,997	13,260	15,392
Nova Scotia—					
Field crops.....	9,064	12,151	12,995	11,748	13,516
Farm animals.....	1,833	1,998	1,924	2,257	2,548
Wool.....	56	89	96	96	112
Dairy products.....	5,354	4,990	5,827	5,948	6,495
Fruits and vegetables.....	2,440	4,386	4,259	5,586	4,067
Poultry and eggs.....	878	965	1,053	1,184	1,216
Fur farming.....	254	304	276	386	448
Maple products.....	47	27	63	46	25
Clover and grass seed.....	2	2	2	1	1
Honey.....	6	9	8	9	9
Totals.....	19,932	24,919	26,506	27,261	28,437

¹ Subject to revision.

² Less than \$500.

1.—Estimated Gross Value of Agricultural Production in Canada, Itemized by Provinces, 1932-36—continued.

Item.	1932.	1933. ¹	1934. ¹	1935. ¹	1936. ¹
	\$'000	\$'000	\$'000	\$'000	\$'000
New Brunswick—					
Field crops.....	12,629	12,044	14,961	14,542	17,784
Farm animals.....	2,147	2,129	2,478	2,931	3,421
Wool.....	45	77	74	91	116
Dairy products.....	4,047	4,307	4,488	4,682	5,025
Fruits and vegetables.....	697	637	908	1,044	1,164
Poultry and eggs.....	1,062	1,065	1,139	1,291	1,323
Fur farming.....	523	560	764	753	873
Maple products.....	44	44	26	48	46
Clover and grass seed.....	3	7	14	9	9
Honey.....	5	6	9	7	6
Totals.....	21,202	20,876	24,861	25,398	29,767
Quebec—					
Field crops.....	70,382	67,512	98,309	83,616	91,288
Farm animals.....	12,496	13,868	17,989	21,812	23,626
Wool.....	332	491	527	628	700
Dairy products.....	39,953	42,989	46,462	49,119	52,284
Fruits and vegetables.....	5,345	4,837	7,078	7,380	7,894
Poultry and eggs.....	6,487	6,271	7,221	7,664	8,215
Fur farming.....	665	895	975	1,165	1,352
Maple products.....	1,727	1,268	1,911	2,267	2,482
Tobacco.....	329	270	831	642	1,089
Flax fibre.....	2	2	100	160	143
Clover and grass seed.....	110	70	315	245	168
Honey.....	216	448	357	381	483
Totals.....	138,042	138,919	182,075	175,079	189,724
Ontario—					
Field crops.....	116,424	135,813	143,734	132,086	162,332
Farm animals.....	21,957	31,500	34,089	43,344	46,732
Wool.....	287	553	479	575	735
Dairy products.....	69,079	74,117	80,018	85,132	91,282
Fruits and vegetables.....	12,733	12,553	16,375	18,697	17,693
Poultry and eggs.....	18,565	16,294	19,464	20,915	22,939
Fur farming.....	644	721	704	966	1,121
Maple products.....	888	720	1,040	1,161	1,161
Tobacco.....	5,703	6,204	6,338	10,117	8,070
Flax fibre.....	170	159	150	161	155
Clover and grass seed.....	615	1,079	857	710	1,442
Honey.....	619	895	1,029	864	718
Totals.....	247,684	280,608	304,277	314,728	354,380
Manitoba—					
Field crops.....	31,937	35,653	49,761	34,944	50,660
Farm animals.....	4,468	6,308	6,568	7,301	9,068
Wool.....	28	89	82	95	132
Dairy products.....	8,751	10,796	9,848	10,416	11,631
Fruits and vegetables.....	986	876	1,471	1,644	827
Poultry and eggs.....	3,395	2,866	2,946	3,538	3,629
Fur farming.....	166	274	272	402	467
Clover and grass seed.....	50	45	70	207	83
Honey.....	412	304	400	354	569
Totals.....	50,193	57,211	71,418	58,901	77,066
Saskatchewan—					
Field crops.....	98,217	82,708	96,473	119,644	138,725
Farm animals.....	8,984	12,711	13,777	16,303	18,246
Wool.....	74	206	180	240	220
Dairy products.....	11,186	12,088	13,102	13,566	15,926
Fruits and vegetables.....	1,674	1,371	2,362	2,655	1,318
Poultry and eggs.....	4,841	4,317	5,879	7,178	6,547
Fur farming.....	121	166	207	255	296
Clover and grass seed.....	62	54	102	168	210
Honey.....	46	100	72	118	263
Totals.....	125,205	113,721	132,154	160,127	181,751

¹ Subject to revision.² Not available.

1.—Estimated Gross Value of Agricultural Revenue of Canada, Itemized by Provinces, 1932-36—concluded.

Item.	1932.	1933. ¹	1934. ¹	1935. ¹	1936. ¹
	\$'000	\$'000	\$'000	\$'000	\$'000
Alberta—					
Field crops.....	95,913	86,499	111,044	93,687	98,914
Farm animals.....	10,255	16,939	18,645	21,382	22,008
Wool.....	195	359	330	348	575
Dairy products.....	11,859	12,986	14,407	14,357	15,756
Fruits and vegetables.....	1,426	1,203	1,996	2,247	1,202
Poultry and eggs.....	3,613	2,999	3,893	4,459	4,132
Fur farming.....	300	422	453	588	682
Clover and grass seed.....	77	55	486	189	212
Honey.....	44	90	150	99	167
Totals.....	123,682	121,552	151,404	137,356	143,648
British Columbia—					
Field crops.....	11,224	12,377	12,749	13,045	15,891
Farm animals.....	2,330	2,665	3,051	3,379	3,808
Wool.....	52	99	95	126	148
Dairy products.....	7,399	7,051	8,232	7,746	8,245
Fruits and vegetables.....	6,758	7,266	8,946	9,271	8,484
Poultry and eggs.....	2,626	2,601	3,246	3,380	4,412
Fur farming.....	90	97	121	138	160
Tobacco.....	56	57	63	4	26
Clover and grass seed.....	36	39	151	147	115
Honey.....	121	157	219	194	170
Totals.....	30,692	32,409	36,873	37,430	41,459

¹ Subject to revision.

Value of Farm Capital.—Table 2 shows approximately, by provinces, the current value of farm capital in the Dominion in 1935 and 1936.

2.—Current Value of Farm Capital in Canada, by Provinces, 1935 and 1936.

Province.	1935.				1936.			
	Lands and Buildings.	Implements and Machinery.	Live Stock.	Total.	Lands and Buildings.	Implements and Machinery.	Live Stock.	Total.
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
P. E. Island.....	39,162	6,608	7,354	53,124	39,162	6,326	7,968	53,456
Nova Scotia.....	88,240	8,596	12,138	108,974	99,623	8,229	13,411	121,263
New Brunswick...	74,114	10,791	14,132	99,037	83,008	10,331	15,381	108,720
Quebec.....	790,992	79,578	95,085	875,655	649,820	76,167	101,204	827,191
Ontario.....	979,128	123,614	179,087	1,281,829	1,026,126	120,563	195,042	1,341,731
Manitoba.....	246,165	41,054	41,249	328,468	224,848 ¹	40,137 ¹	45,885	310,870
Saskatchewan.....	899,606	137,703	92,205	1,129,514	797,795 ¹	131,994 ¹	97,619	1,027,408
Alberta.....	521,588	92,304	79,251	693,143	517,003 ¹	89,751 ¹	82,434	689,188
British Columbia..	113,239	10,915	18,493	142,647	117,089	10,699	20,760	148,548
Totals.....	3,662,234	511,163	538,994	4,712,391	3,554,474	494,197	579,704	4,628,375

¹ Based on preliminary returns from the 1936 Quinquennial Census.

The items included in the term "farm capital" as used in Table 2, are lands and buildings, implements and machinery, including motor trucks and automobiles, and live stock, including poultry and animals on fur farms. The 1931 values of lands, buildings, implements, and machinery were reported by the decennial census taken at June 1, in that year. Changes in the total value of lands and buildings for the years 1932 to 1936 have been based on the value of occupied farm lands reported annually by crop correspondents. Changes in the annual values of farm implements and machinery have been estimated on the basis of sales reported each year.

The current value of farm capital in Canada for 1936 is estimated at \$4,628,375,000 as compared with the revised estimates of \$4,712,391,000 for 1935; \$4,464,147,000 for 1934; \$4,443,159,000 for 1933; \$4,515,944,000 for 1932; and \$5,220,660,000 for 1931.

Subsection 2.—Acreages, Yields, and Values of Field Crops.

The Chief Field Crops of the Latest Ten Years.—In Table 3 will be found a summary statement of the acreages, yields, and values of wheat, oats, barley, rye, buckwheat, potatoes, hay and clover, and alfalfa for the latest ten years. Comparative figures back to 1908 were shown at pp. 230-232 of the 1929 Year Book.

A rapid increase in the acreage of field crops was a characteristic of the pre-war and the war periods, when settlement of the western plains occurred. During the latest ten years acreages have been relatively stable for wheat and oats. Fluctuations in the areas devoted to barley, rye, and flax have been quite marked as changes in the prices of these crops encouraged or discouraged production. Hay and clover acreage has shown a tendency to decline, but an upward trend in alfalfa acreage has occurred, due to the development of seed-producing areas in western Canada. Successive droughts in the West have considerably reduced production of the principal grain crops in the past few years, and thus the data given in the table do not reflect the average productive capacity of the areas sown to each crop. Certain figures for earlier years on acreage, yield, and value will be found in the Statistical Summary of the Progress of Canada at the beginning of this volume.

3.—Acreages, Yields, and Values of Principal Crops Grown in Canada, 1928-37.

NOTE.—Comparative figures for the years 1908-26 are given in the Canada Year Book, 1929, pp. 230-232. The total value for wheat for 1912 should be \$139,090,000 instead of \$19,090,000.

Crop and Year.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.	Crop and Year.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.
	'000 acres.	bu.	'000 bu.	\$ per bu.	\$'000		'000 acres.	bu.	'000 bu.	\$ per bu.	\$'000
Wheat—						Barley—					
1928.....	24,119	23.5	566,726	0.80	451,235	1928.....	4,881	27.9	136,391	0.56	76,112
1929.....	25,255	12.1	304,520	1.05	319,715	1929.....	5,926	17.3	102,313	0.59	60,505
1930.....	24,898	16.9	420,672	0.49	204,693	1930.....	5,559	24.3	135,160	0.20	27,254
1931.....	26,355	12.2	321,325	0.38	123,550	1931.....	3,791	17.8	67,383	0.26	17,465
1932.....	27,182	16.3	443,061	0.35	154,760	1932.....	3,758	21.5	80,773	0.23	18,855
1933.....	25,991	10.8	281,892	0.49	136,958	1933.....	3,658	17.3	63,359	0.30	18,954
1934.....	23,985	11.5	275,849	0.61	169,631	1934.....	3,613	17.6	63,742	0.47	29,975
1935.....	24,116	11.7	281,935	0.61	173,065	1935.....	3,887	21.6	83,975	0.29	24,465
1936.....	25,605 ¹	8.6 ¹	219,218 ¹	0.94 ¹	205,327 ¹	1936.....	4,438 ¹	16.2	71,922	0.69 ¹	49,512 ¹
1937.....	25,570	7.1	182,410	1.00	182,384	1937.....	4,331	19.2	83,124	0.51	41,984
Oats—						Rye—					
1928.....	13,137	34.4	452,153	0.47	210,956	1928.....	840	17.4	14,618	0.79	11,491
1929.....	12,479	22.7	282,838	0.59	168,017	1929.....	992	13.3	13,161	0.84	11,095
1930.....	13,259	31.9	423,148	0.24	102,919	1930.....	1,448	15.2	22,019	0.20	4,402
1931.....	12,838	25.6	328,278	0.24	77,970	1931.....	799	6.7	5,322	0.28	1,476
1932.....	13,148	29.8	391,561	0.19	75,988	1932.....	774	10.9	8,470	0.27	2,284
1933.....	13,529	22.7	307,478	0.26	79,818	1933.....	583	7.2	4,177	0.38	1,603
1934.....	13,731	23.4	321,120	0.32	103,124	1934.....	685	6.9	4,706	0.49	2,325
1935.....	14,096	28.0	394,348	0.24	93,409	1935.....	720	13.4	9,606	0.27	2,634
1936.....	13,288 ¹	20.5 ¹	271,778	0.43 ¹	116,267 ¹	1936.....	625 ¹	6.8 ¹	4,281	0.70 ¹	2,980 ¹
1937.....	13,049	20.6	268,442	0.43	114,665	1937.....	894	6.5	5,771	0.73	4,225

¹ Revised since the publication of the 1937 Year Book.

3.—Acreages, Yields, and Values of Principal Crops Grown in Canada, 1928-37—concl.

Crop and Year.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.	Crop and Year.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.
	'000 acres.	bu.	'000 bu.	\$ per bu.	\$'000		'000 acres.	cwt.	'000 cwt.	\$ per cwt.	\$'000
Buckwheat—						Potatoes—					
1928.....	503	21.7	10,899	0.93	10,128	1933.....	528	81.0	42,745	0.77	33,092
1929.....	516	20.3	10,470	0.94	9,867	1934.....	569	84.0	48,095	0.50	23,822
1930.....	490	22.2	10,903	0.65	7,124	1935.....	507	76.0	38,670	0.80	30,854
1931.....	336	20.6	6,917	0.50	3,454	1936.....	502 ¹	79.0	39,614 ¹	1.14 ¹	45,125 ¹
1932.....	368	22.9	8,424	0.43	3,585	1937.....	531	80.0	42,547	0.64	27,143
1933.....	398	21.3	8,483	0.50	4,233						
1934.....	407	21.2	8,635	0.53	4,572	Hay and		tons.	'000 tons.	per ton.	
1935.....	380	20.9	7,949	0.51	4,017	Clover—					
1936.....	397 ¹	21.7 ¹	8,596 ¹	0.71 ¹	6,088 ¹	1928.....	10,321	1.60	16,515	10.37	171,225
1937.....	396	19.6	7,745	0.71	5,494	1929.....	10,560	1.50	15,833	11.65	184,528
Flaxseed—						1930.....	10,618	1.54	16,397	9.83	161,122
1928.....	378	9.6	3,614	1.59	5,758	1931.....	9,114	1.60	14,540	7.57	110,110
1929.....	382	5.4	2,060	2.38	4,898	1932.....	8,812	1.54	13,559	7.13	96,654
1930.....	582	8.7	5,069	0.94	4,741	1933.....	8,876	1.29	11,443	8.77	100,306
1931.....	648	3.8	2,465	0.79	1,944	1934.....	8,881	1.26	11,174	11.75	131,295
1932.....	462	5.9	2,719	0.62	1,682	1935.....	8,698	1.62	14,060	7.62	107,133
1933.....	244	2.6	632	1.20	756	1936.....	8,784 ¹	1.57	13,803	7.66	105,703 ¹
1934.....	227	4.0	910	1.15	1,049	1937.....	8,693	1.50	13,030	7.47	97,309
1935.....	307	5.4	1,667	1.19	1,991						
1936.....	477 ¹	3.8	1,795	1.44 ¹	2,588 ¹	Alfalfa—					
1937.....	241	2.9	698	1.51	1,054	1928.....	854	2.35	2,010	11.51	23,138
Potatoes—		cwt.	'000 cwt.	per cwt.		1929.....	799	2.30	1,835	12.63	23,183
1928.....	599	83.8	50,195	0.81	40,874	1930.....	744	2.20	1,640	12.12	19,877
1929.....	544	78.4	39,930	1.59	63,372	1931.....	568	2.45	1,388	10.36	14,381
1930.....	571	84.4	48,241	0.83	39,858	1932.....	666	2.65	1,764	8.58	15,131
1931.....	592	88.0	52,305	0.43	22,359	1933.....	722	2.29	1,652	9.25	15,279
1932.....	522	76.0	39,416	0.63	24,920	1934.....	679	1.96	1,328	12.67	16,822
						1935.....	762	2.57	1,959	8.04	15,743
						1936.....	854	2.30	1,966	9.19 ¹	18,077 ¹
						1937.....	849	2.48	2,107	8.04	16,947

¹ Revised since the publication of the 1937 Year Book.

Total Acreages and Values, 1932-37.—Table 4 shows for Canada and the provinces, for the latest six years, the total estimated areas and values of field crops, and Table 5 the areas, yields, and values of the principal field crops in Canada, by provinces, for the years 1936 and 1937.

4.—Total Acreages and Values of Field Crops in Canada, by Provinces, 1932-37.

NOTE.—For earlier figures, see Statistical Summary at the beginning of this volume.

Province.	1932.	1933.	1934.	1935.	1936.	1937.
	acres.	acres.	acres.	acres.	acres.	acres.
Acreages—						
P. E. Island.....	476,200	476,850	473,000	472,900	483,200	490,300
Nova Scotia.....	536,000	542,100	554,800	558,700	551,400	548,100
New Brunswick.....	907,500	908,400	906,300	913,900	921,300	907,300
Quebec.....	5,832,100	5,784,700	5,950,300	5,912,800	6,018,400	6,042,300
Ontario.....	9,324,300	9,195,300	8,999,900	9,104,800	9,118,900	9,037,000
Manitoba.....	5,866,800	5,963,900	6,000,900	5,962,000	6,081,100 ¹	6,421,600
Saskatchewan.....	22,333,900	21,306,000	19,771,820	20,176,210	21,757,350 ¹	20,483,600
Alberta.....	14,028,700	13,909,400	12,878,900	13,451,450	12,743,150 ¹	13,408,800
British Columbia.....	437,700	446,800	454,400	463,700	472,050	487,700
Totals, Acreages.....	59,643,200	58,533,450	55,990,320	57,016,460	58,146,850¹	57,826,700
Values—						
P. E. Island.....	\$ 6,737,000	\$ 8,841,000	\$ 9,054,000	\$ 8,561,000	\$ 10,693,000 ¹	\$ 7,475,000
Nova Scotia.....	9,064,000	12,151,000	12,995,000	11,748,000	13,593,000 ¹	10,570,000
New Brunswick.....	12,629,000	12,044,000	14,961,000	14,542,000	18,396,000 ¹	13,598,000
Quebec.....	70,382,000	67,512,000	98,309,000	83,616,000	91,276,000 ¹	81,629,000
Ontario.....	116,424,000	135,813,000	143,734,000	132,086,000	166,284,000 ¹	150,367,000
Manitoba.....	31,937,000	35,653,000	49,761,000	34,944,000	50,401,000 ¹	90,930,000
Saskatchewan.....	98,216,900	82,708,000	96,472,600	119,947,600	141,793,400 ¹	52,187,600
Alberta.....	95,913,000	86,499,000	111,044,000	93,687,000	103,603,000 ¹	130,474,000
British Columbia.....	11,224,000	12,377,000	12,749,000	18,045,300	16,261,000 ¹	16,592,500
Totals, Values.....	452,526,900	453,598,000	549,079,600	512,176,900	612,300,400¹	553,823,100

¹ Revised since the publication of the 1937 Year Book.

5.—Acreages, Yields, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1936 and 1937.

NOTE.—The figures for 1936 differ, in many cases, from those appearing in the 1937 Year Book owing to revisions in the estimates. Those for 1937 are subject to revision.

Province and Field Crop.	Year.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.
		acres.	bu.	bu.	\$ per bu.	\$
Canada—						
Fall wheat.....	1936	509,300	24.5	12,478,000	1.16	14,474,000
	1937	718,800	26.0	18,689,000	1.04	19,437,000
Spring wheat.....	1936	25,095,500	8.2	206,740,000	0.92	190,853,000
	1937	24,551,400	6.6	163,721,000	1.00	162,947,000
All wheat.....	1936	25,604,800	8.6	219,218,000	0.94	205,327,000
	1937	25,570,200	7.1	182,410,000	1.00	182,384,000
Oats.....	1936	13,287,700	20.5	271,778,000	0.43	116,267,000
	1937	13,048,500	20.6	268,442,000	0.43	114,665,000
Barley.....	1936	4,437,600	16.2	71,922,000	0.69	49,512,000
	1937	4,331,400	19.2	83,124,000	0.51	41,984,000
Fall rye.....	1936	458,500	6.6	3,042,000	0.70	2,130,000
	1937	700,300	6.5	4,579,000	0.73	3,358,000
Spring rye.....	1936	166,800	7.4	1,239,000	0.69	850,000
	1937	193,400	6.2	1,192,000	0.73	867,000
All rye.....	1936	625,300	6.8	4,281,000	0.70	2,980,000
	1937	893,700	6.5	5,771,000	0.73	4,225,000
Peas.....	1936	92,500	13.3	1,229,300	1.62	1,991,000
	1937	84,000	14.3	1,199,600	1.68	2,012,000
Beans.....	1936	64,000	13.7	876,000	2.04	1,790,400
	1937	67,600	19.2	1,295,500	1.23	1,595,600
Buckwheat.....	1936	396,700	21.7	8,596,000	0.71	6,088,000
	1937	395,500	19.6	7,745,000	0.71	5,494,000
Mixed grains.....	1936	1,171,600	28.7	33,639,000	0.56	18,751,000
	1937	1,128,200	32.0	36,129,000	0.51	18,296,000
Flaxseed.....	1936	477,150	3.8	1,795,300	1.44	2,588,000
	1937	241,300	2.9	697,600	1.51	1,053,500
Corn for husking.....	1936	164,400	37.0	6,083,000	0.70	4,258,000
	1937	165,600	32.7	5,415,000	0.61	3,303,000
			cwt.	cwt.	per cwt.	
Potatoes.....	1936	502,100	79.0	39,614,000	1.14	45,125,000
	1937	531,200	80.0	42,547,000	0.64	27,143,000
Turnips, etc.....	1936	182,500	209.0	38,208,000	0.35	13,382,000
	1937	185,700	195.0	36,300,000	0.33	11,799,000
			tons.	tons.	per ton.	
Hay and clover.....	1936	8,784,100	1.57	13,803,000	7.66	105,703,000
	1937	8,693,300	1.50	13,030,000	7.47	97,309,000
Alfalfa.....	1936	854,200	2.30	1,966,000	9.19	18,077,000
	1937	848,900	2.48	2,107,000	8.04	16,947,000
Fodder corn.....	1936	401,600	7.79	3,128,400	3.38	10,572,000
	1937	447,300	8.78	3,927,500	3.08	12,087,000
Grain hay.....	1936	1,045,000	0.97	1,010,000	6.41	6,473,000
	1937	1,147,800	1.54	1,768,000	6.23	11,021,000
Sugar beets.....	1936	55,600	10.70	595,000	5.74	3,416,000
	1937	46,500	8.99	418,000	5.99	2,505,000

5.—Acreages, Yields, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1936 and 1937—continued.

Province and Field Crop.	Year.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.
		acres.	bu.	bu.	\$ per bu.	\$
Prince Edward Island—						
Spring wheat.....	1936	24,000	8.3	199,000	1.10	219,000
	1937	18,600	12.8	238,000	1.28	305,000
Oats.....	1936	154,800	35.3	5,464,000	0.45	2,459,000
	1937	153,300	22.4	3,437,000	0.47	1,615,000
Barley.....	1936	5,200	28.5	148,000	0.62	92,000
	1937	6,500	21.4	139,000	0.78	108,000
Buckwheat.....	1936	3,800	22.1	84,000	0.59	50,000
	1937	3,700	15.4	57,000	0.70	40,000
Mixed grains.....	1936	25,700	36.0	925,000	0.55	509,000
	1937	29,300	28.4	832,000	0.58	483,000
			cwt.	cwt.	per cwt.	
Potatoes.....	1936	33,400	118.0	3,941,000	0.90	3,547,000
	1937	35,800	97.0	3,471,000	0.39	1,354,000
Turnips, etc.....	1936	12,000	307.0	3,684,000	0.26	958,000
	1937	11,600	180.0	2,088,000	0.30	626,000
			tons.	tons.	per ton.	
Hay and clover.....	1936	223,800	1.59	356,000	8.00	2,848,000
	1937	231,100	1.66	383,000	7.65	2,930,000
Fodder corn.....	1936	500	5.00	2,500	4.50	11,000
	1937	400	6.75	2,700	5.00	14,000
Nova Scotia—						
			bu.	bu.	per bu.	
Spring wheat.....	1936	4,000	19.3	77,000	1.13	91,000
	1937	4,000	12.8	51,000	1.37	70,000
Oats.....	1936	96,600	39.2	3,788,000	0.60	2,273,000
	1937	87,400	24.9	2,174,000	0.64	1,391,000
Barley.....	1936	8,900	30.2	269,000	0.81	218,000
	1937	9,600	20.3	195,000	0.88	172,000
Buckwheat.....	1936	5,700	23.3	133,000	0.89	118,000
	1937	5,200	17.3	90,000	0.89	80,000
Mixed grains.....	1936	6,400	36.1	231,000	0.69	159,000
	1937	6,400	25.5	163,000	0.76	124,000
			cwt.	cwt.	per cwt.	
Potatoes.....	1936	20,600	95.0	1,957,000	1.13	2,211,000
	1937	22,000	86.0	1,885,000	0.75	1,414,000
Turnips, etc.....	1936	11,700	325.0	3,803,000	0.40	1,521,000
	1937	11,700	249.0	2,912,000	0.40	1,165,000
			tons.	tons.	per ton.	
Hay and clover.....	1936	396,700	1.85	734,000	9.50	6,973,000
	1937	401,000	1.91	766,000	8.00	6,128,000
Fodder corn.....	1936	800	8.95	7,200	4.00	29,000
	1937	800	8.00	6,400	4.00	26,000

5.—Acreages, Yields, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1936 and 1937—continued.

Province and Field Crop.	Year.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.
		acres.	bu.	bu.	\$ per bu.	\$
New Brunswick—						
Spring wheat.....	1936	16,400	19.0	311,000	1.18	367,000
	1937	13,000	14.2	184,000	1.37	252,000
Oats.....	1936	219,900	32.8	7,218,000	0.57	4,114,000
	1937	210,400	24.4	5,144,000	0.57	2,932,000
Barley.....	1936	13,300	27.4	365,000	0.73	266,000
	1937	13,400	20.0	268,000	0.75	201,000
Beans.....	1936	1,200	15.2	18,000	2.22	40,000
	1937	1,100	19.0	21,000	2.49	52,000
Buckwheat.....	1936	34,400	26.3	905,000	0.72	652,000
	1937	32,500	17.8	579,000	0.79	457,000
Mixed grains.....	1936	3,700	24.6	91,000	0.59	54,000
	1937	3,900	25.1	98,000	0.68	67,000
Potatoes.....	1936	45,100	cwt.	cwt.	per cwt.	
	1937	50,200	126.0	5,683,000	1.05	5,967,000
			115.0	5,773,000	0.50	2,887,000
Turnips, etc.....	1936	11,800	238.0	2,808,000	0.40	1,123,000
	1937	11,500	240.0	2,760,000	0.40	1,104,000
Hay and clover.....	1936	574,700	tons.	tons.	per ton.	
	1937	570,500	1.55	891,000	6.50	5,792,000
			1.41	802,000	7.00	5,614,000
Fodder corn.....	1936	800	7.13	5,700	3.75	21,000
	1937	800	9.21	7,400	4.38	32,000
Quebec—						
Spring wheat.....	1936	56,300	bu.	bu.	per bu.	
	1937	53,000	16.5	931,000	1.15	1,069,000
			16.6	879,000	1.24	1,094,000
Oats.....	1936	1,690,200	27.9	47,182,000	0.49	23,329,000
	1937	1,644,500	21.8	35,850,000	0.61	22,023,000
Barley.....	1936	153,900	26.4	4,000,000	0.71	2,884,000
	1937	168,500	21.3	3,589,000	0.80	2,875,000
Spring rye.....	1936	6,300	17.3	109,000	0.83	91,000
	1937	6,700	16.0	107,000	0.95	102,000
Peas.....	1936	18,500	14.0	259,000	2.02	522,000
	1937	20,400	13.2	270,000	2.07	559,000
Beans.....	1936	4,600	17.8	82,000	2.35	193,000
	1937	7,500	17.6	132,000	2.11	279,000
Buckwheat.....	1936	151,400	22.8	3,454,000	0.67	2,330,000
	1937	153,100	20.7	3,168,000	0.82	2,583,000
Mixed grains.....	1936	128,800	28.3	3,647,000	0.64	2,329,000
	1937	133,800	23.6	3,159,000	0.74	2,350,000
Flaxseed.....	1936	2,900	9.8	28,300	1.94	55,000
	1937	2,800	9.3	26,000	1.96	51,000
Potatoes.....	1936	131,200	cwt.	cwt.	per cwt.	
	1937	143,200	94.0	12,336,000	1.08	13,278,000
			87.0	12,458,000	0.64	8,032,000
Turnips, etc.....	1936	37,200	211.5	7,868,000	0.45	3,525,000
	1937	37,600	166.0	6,226,000	0.44	2,733,000

5.—Acreages, Yields, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1936 and 1937—continued.

Province and Field Crop.	Year.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.
		acres.	tons.	tons.	\$ per ton.	\$
Quebec—concluded.						
Hay and clover.....	1936	3,575,800	1.60	5,559,000	7.15	39,734,000
	1937	3,608,600	1.33	4,799,000	7.66	36,756,000
Alfalfa.....	1936	13,000	2.80	36,000	8.42	303,000
	1937	15,300	2.20	34,000	9.03	307,000
Fodder corn.....	1936	48,300	8.80	427,000	3.83	1,634,000
	1937	47,300	9.87	467,000	4.04	1,885,000
Ontario—						
			bu.	bu.	per bu.	
Fall wheat.....	1936	509,300	24.5	12,478,000	1.16	14,474,000
	1937	718,800	26.0	18,689,000	1.04	19,437,000
Spring wheat.....	1936	98,000	17.7	1,735,000	1.15	1,995,000
	1937	94,200	17.0	1,601,000	1.02	1,633,000
All wheat.....	1936	607,300	23.4	14,213,000	1.16	16,469,000
	1937	813,000	25.0	20,290,000	1.04	21,070,000
Oats.....	1936	2,345,900	28.5	66,858,000	0.50	33,429,000
	1937	2,263,900	32.6	73,803,000	0.42	30,997,000
Barley.....	1936	519,200	27.0	14,018,000	0.80	11,214,000
	1937	555,900	28.8	16,010,000	0.59	9,446,000
Fall rye.....	1936	53,200	16.8	894,000	0.84	751,000
	1937	74,700	17.3	1,292,000	0.78	1,008,000
Peas.....	1936	66,800	12.2	815,000	1.55	1,263,000
	1937	55,900	13.6	760,000	1.56	1,186,000
Beans.....	1936	56,300	13.2	743,000	2.02	1,501,000
	1937	57,200	19.3	1,104,000	1.07	1,181,000
Buckwheat.....	1936	197,000	20.1	3,960,000	0.73	2,891,000
	1937	195,200	19.2	3,748,000	0.60	2,249,000
Mixed grains.....	1936	953,100	29.2	27,831,000	0.55	15,307,000
	1937	890,100	34.5	30,708,000	0.48	14,740,000
Flaxseed.....	1936	5,300	6.5	34,000	1.48	50,000
	1937	5,000	10.3	52,000	1.40	73,000
Corn for husking.....	1936	164,400	37.0	6,083,000	0.70	4,258,000
	1937	165,600	32.7	5,415,000	0.61	3,303,000
			cwt.	cwt.	per cwt.	
Potatoes.....	1936	145,000	64.0	9,280,000	1.35	12,528,000
	1937	150,600	67.0	10,090,000	0.60	6,054,000
Turnips, etc.....	1936	96,200	190.0	18,241,000	0.28	5,107,000
	1937	97,200	205.0	19,926,000	0.24	4,782,000
			tons.	tons.	per ton.	
Hay and clover.....	1936	2,898,300	1.60	4,637,000	8.26	38,302,000
	1937	2,722,200	1.69	4,601,000	7.14	32,851,000
Alfalfa.....	1936	666,400	2.28	1,519,000	8.74	13,276,000
	1937	646,700	2.57	1,662,000	7.31	12,149,000
Fodder corn.....	1936	306,900	8.05	2,471,000	3.18	7,858,000
	1937	317,300	9.71	3,081,000	2.69	8,288,000
Sugar beets.....	1936	37,600	10.40	391,000	5.32	2,080,000
	1937	26,500	6.98	185,000	5.35	990,000

5.—Acreages, Yields, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1936 and 1937—continued.

Province and Field Crop.	Year.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.
		acres.	bu.	bu.	\$ per bu.	\$
Manitoba—						
Spring wheat.....	1936	2,556,600	10.2	26,000,000	0.91	23,660,000
	1937	2,872,000	16.7	48,000,000	0.97	46,560,000
Oats.....	1936	1,453,400	14.0	20,400,000	0.37	7,548,000
	1937	1,410,000	30.5	43,075,000	0.39	16,799,000
Barley.....	1936	1,423,000	13.3	18,990,000	0.66	12,533,000
	1937	1,393,000	25.0	34,800,000	0.47	16,356,000
Fall rye.....	1936	74,700	10.7	800,000	0.61	488,000
	1937	116,600	19.0	2,220,000	0.73	1,621,000
Spring rye.....	1936	13,600	11.0	150,000	0.61	92,000
	1937	18,600	12.9	240,000	0.73	175,000
All rye.....	1936	88,300	10.8	950,000	0.61	580,000
	1937	135,200	18.2	2,460,000	0.73	1,796,000
Peas.....	1936	1,600	13.8	22,000	1.13	25,000
	1937	2,600	17.1	44,000	1.49	66,000
Buckwheat.....	1936	4,400	13.6	60,000	0.78	47,000
	1937	5,800	17.8	103,000	0.83	85,000
Mixed grains.....	1936	9,900	15.5	153,000	0.45	69,000
	1937	23,800	26.3	626,000	0.44	275,000
Flaxseed.....	1936	89,100	4.7	415,000	1.42	589,000
	1937	38,300	9.7	370,000	1.51	559,000
			cwt.	cwt.	per cwt.	
Potatoes.....	1936	33,600	30.0	1,006,000	1.40	1,408,000
	1937	30,900	80.0	2,481,000	0.68	1,687,000
Turnips, etc.....	1936	3,100	67.0	207,000	0.69	143,000
	1937	5,500	131.0	723,000	0.52	376,000
			tons.	tons.	per ton.	
Hay and clover.....	1936	358,700	1.61	578,000	5.00	2,890,000
	1937	410,000	1.92	788,000	5.64	4,444,000
Alfalfa.....	1936	28,100	1.99	56,000	6.50	364,000
	1937	30,000	2.37	71,000	7.77	552,000
Fodder corn.....	1936	31,300	3.87	121,000	4.50	545,000
	1937	64,500	4.26	275,000	5.00	1,375,000
Saskatchewan—						
			bu.	bu.	per bu.	
Spring wheat.....	1936	14,744,000	7.5	110,000,000	0.92	101,202,000
	1937	13,893,000	2.7	37,000,000	1.04	38,480,000
Oats.....	1936	4,684,200	14.0	65,462,000	0.35	22,912,000
	1937	4,380,000	5.1	22,338,000	0.37	8,265,000
Barley.....	1936	1,302,100	12.8	16,627,000	0.67	11,140,000
	1937	1,174,000	4.7	5,518,000	0.46	2,538,000
Fall rye.....	1936	253,700	3.8	974,000	0.63	614,000
	1937	429,000	0.9	386,000	0.67	259,000
Spring rye.....	1936	82,400	6.3	515,000	0.63	324,000
	1937	89,000	2.8	249,000	0.67	167,000

5.—Acreages, Yields, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1936 and 1937—continued.

Province and Field Crop.	Year.	Area.	Yield. per Acre.	Total Yield.	Average Price.	Total Value.
		acres.	bu.	bu.	\$ per bu.	\$
Saskatchewan—concluded.						
All rye.....	1936	336,100	4.4	1,489,000	0.63	938,000
	1937	518,000	1.2	635,000	0.67	426,000
Peas.....	1936	500	6.5	3,300	0.85	3,000
	1937	400	3.9	1,600	1.00	2,000
Beans.....	1936	250	8.5	2,000	1.20	2,400
	1937	200	2.5	500	1.20	600
Mixed grains.....	1936	17,900	11.3	202,000	0.40	81,000
	1937	18,800	3.8	71,000	0.50	36,000
Flaxseed.....	1936	366,200	3.4	1,240,000	1.44	1,786,000
	1937	175,000	0.7	123,000	1.47	181,000
			cwt.	cwt.	per cwt.	
Potatoes.....	1936	46,100	35.0	1,635,000	1.11	1,815,000
	1937	48,600	27.0	1,312,000	0.78	1,023,000
Turnips, etc.....	1936	2,000	36.0	72,000	0.68	49,000
	1937	2,400	18.0	43,000	0.72	31,000
			tons.	tons.	per ton.	
Hay and clover.....	1936	233,100	1.27	297,000	5.35	1,589,000
	1937	242,400	0.53	128,000	7.43	951,000
Alfalfa.....	1936	20,000	1.30	26,000	9.23	240,000
	1937	23,000	1.03	24,000	9.27	222,000
Fodder corn.....	1936	4,900	1.43	7,000	5.40	38,000
	1937	7,800	0.62	5,000	6.42	32,000
Alberta—			bu.	bu.	per bu.	
Spring wheat.....	1936	7,537,200	8.8	66,000,000	0.92	60,720,000
	1937	7,834,000	9.4	74,000,000	0.98	72,520,000
Oats.....	1936	2,536,700	19.7	50,000,000	0.35	17,500,000
	1937	2,789,000	27.6	77,000,000	0.36	27,720,000
Barley.....	1936	999,000	17.0	17,000,000	0.64	10,880,000
	1937	995,300	22.2	22,100,000	0.45	9,945,000
Fall rye.....	1936	76,900	4.9	374,000	0.74	277,000
	1937	80,000	8.5	681,000	0.69	470,000
Spring rye.....	1936	60,500	6.4	388,000	0.74	287,000
	1937	75,000	6.7	504,000	0.69	348,000
All rye.....	1936	137,400	5.5	762,000	0.74	564,000
	1937	155,000	7.6	1,185,000	0.69	818,000
Peas.....	1936	700	21.4	15,000	1.50	23,000
	1937	700	20.3	14,000	1.65	23,000
Beans.....	1936	850	10.6	9,000	1.50	14,000
	1937	900	19.0	17,000	2.40	41,000
Mixed grains.....	1936	21,800	18.5	403,000	0.39	157,000
	1937	18,000	17.3	311,000	0.41	128,000
Flaxseed.....	1936	13,400	5.6	75,000	1.39	104,000
	1937	20,000	6.2	124,000	1.50	186,000

5.—Acreages, Yields, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1936 and 1937—concluded.

Province and Field Crop.	Year.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.
		acres.	cwt.	cwt.	\$ per cwt.	\$
Alberta—concluded.						
Potatoes.....	1936	29,600	61.0	1,816,000	0.95	1,725,000
	1937	31,000	90.0	2,790,000	0.78	2,176,000
Turnips, etc.....	1936	2,600	51.0	133,000	0.70	93,000
	1937	2,700	116.0	313,000	0.63	197,000
			tons.	tons.	per ton.	
Hay and clover.....	1936	367,500	1.15	424,000	7.84	3,324,000
	1937	356,500	1.23	438,000	8.23	3,605,000
Alfalfa.....	1936	76,500	2.17	166,000	10.20	1,693,000
	1937	83,000	1.88	156,000	10.29	1,605,000
Fodder corn.....	1936	1,900	5.26	10,000	7.00	70,000
	1937	2,700	5.55	15,000	6.33	95,000
Grain hay.....	1936	1,000,000	0.90	900,000	6.00	5,400,000
	1937	1,100,000	1.50	1,650,000	6.00	9,900,000
Sugar beets.....	1936	18,000	11.33	204,000	6.55	1,336,000
	1937	20,000	11.65	233,000	6.50	1,515,000
British Columbia—						
			bu.	bu.	per bu.	
Spring wheat.....	1936	59,000	25.2	1,487,000	1.03	1,532,000
	1937	69,600	25.4	1,768,000	1.15	2,033,000
Oats.....	1936	106,000	51.0	5,406,000	0.50	2,703,000
	1937	110,000	51.1	5,621,000	0.52	2,923,000
Barley.....	1936	13,000	34.2	445,000	0.64	285,000
	1937	15,200	33.2	505,000	0.68	343,000
Spring rye.....	1936	4,000	19.2	77,000	0.73	56,000
	1937	4,100	22.4	92,000	0.81	75,000
Peas.....	1936	4,400	26.2	115,000	1.35	155,000
	1937	4,000	27.5	110,000	1.60	176,000
Beans.....	1936	800	27.1	22,000	1.80	40,000
	1937	700	29.3	21,000	2.00	42,000
Mixed grains.....	1936	4,300	36.3	156,000	0.55	86,000
	1937	4,100	39.2	161,000	0.58	93,000
Flaxseed.....	1936	250	13.5	3,000	1.25	4,000
	1937	200	13.0	2,600	1.35	3,500
			cwt.	cwt.	per cwt.	
Potatoes.....	1936	17,500	112.0	1,960,000	1.35	2,646,000
	1937	18,900	121.0	2,287,000	1.10	2,516,000
Turnips, etc.....	1936	5,900	236.0	1,392,000	0.62	863,000
	1937	5,500	238.0	1,309,000	0.60	785,000
			tons.	tons.	per ton.	
Hay and clover.....	1936	155,500	2.10	327,000	13.00	4,251,000
	1937	151,000	2.15	325,000	12.40	4,030,000
Alfalfa.....	1936	50,200	3.25	163,000	13.50	2,201,000
	1937	50,900	3.14	160,000	13.20	2,112,000
Fodder corn.....	1936	6,200	12.47	77,000	4.75	366,000
	1937	5,700	11.96	68,000	5.00	340,000
Grain hay.....	1936	45,000	2.45	110,000	9.75	1,073,000
	1937	47,800	2.47	118,000	9.50	1,121,000

Acreages under Pasture.—Table 6 gives the estimated acreages under pasture in Canada, by provinces, for the years 1931 to 1937.

6.—Estimated Acreages under Pasture in Canada, 1931-37.

Province.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	acres.	acres.	acres.	acres.	acres.	acres.	acres.
Prince Edward Island	235,000	210,200	209,700	203,600	214,000	219,200	217,100
Nova Scotia.....	866,500	704,100	704,100	709,400	695,200	726,200	706,360
New Brunswick.....	474,600	518,300	516,300	535,800	521,600	520,000	507,800
Quebec.....	3,686,100	2,669,600	2,843,700	2,919,700	2,973,200	2,992,500	2,993,410
Ontario.....	3,031,717	3,012,500	2,995,500	2,908,300	2,831,400	2,828,300	2,782,800
Manitoba.....	239,800	232,100	246,700	232,200	240,000	426,027 ¹	245,000
Saskatchewan.....	400,300	444,900	451,600	453,900	475,350	635,050 ¹	445,720
Alberta.....	384,900	350,500	220,000	261,800	245,640	517,841 ¹	298,790
British Columbia.....	69,272	76,500	80,200	86,500	94,900	108,300	111,000
Indian Reserves.....	39,913	46,000	49,200	42,200	49,848	52,874	58,232
Totals.....	9,428,102	8,264,700	8,317,000	8,353,400	8,341,138	9,026,292²	8,366,212

¹ Improved land under pasture.

² See text immediately following this table.

The foregoing totals are not entirely comprehensive since those for the Maritime Provinces, Quebec, and Ontario include all pasture, seeded and natural, while the figures for the four western provinces are 'seeded pasture' only, except for the year 1936 when the corresponding data for the Prairie Provinces are not available. The 1936 figures shown for these three provinces represent the acreage of 'improved land under pasture' as reported in the returns of the Quinquennial Census of the Prairie Provinces for 1936. The total figure for Canada shown for that year, therefore, although it is a more representative total than those for other years is not comparable with them.

Most of the land used for pasture in the Prairie Provinces is 'natural'. The census figures for the area under 'natural' pasture in 1936, with the corresponding figures from the Census of 1931 within brackets are, in acres, as follows: Manitoba 3,304,017 (3,601,644); Saskatchewan 15,230,425 (15,755,179); Alberta 15,196,595 (15,960,335).

The areas under grazing leases in the western provinces as at Mar. 31, 1935-37, are reported by the provincial lands administration branches as shown in Table 7.

7.—Provincial Lands under Grazing Leases, 1935-37.

Province.	1935.		1936.		1937.	
	Number of Leases.	Acres.	Number of Leases.	Acres.	Number of Leases.	Acres.
Manitoba.....	1,310	296,477	1,359	281,708	1,252	270,471
Saskatchewan.....	7,559	4,277,476	9,125	4,569,500	7,397	4,330,563
Alberta.....	3,310	3,141,842	3,201	3,590,562	2,782	3,152,126
British Columbia.....	634	474,770	697	484,758	730	561,527
Totals.....	12,813	8,190,565	14,382	8,926,528	12,161	8,314,687

Average Yields per Acre.—Table 8 gives, for the years 1930 to 1937, the average yields per acre of the various field crops, together with the long-time average yields per acre.

8.—Annual Average Yields per Acre of Field Crops for Canada, 1930-37, with Long-Time Averages.

Field Crop.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	Long-Time Average
	bu.	bu.	bu.	bu.	bu.	bu.	bu.	bu.	bu.
Wheat.....	16.9	12.2	16.3	10.8	11.5	11.5	8.6 ¹	7.1	17.1
Oats.....	31.9	25.6	29.8	22.7	23.4	28.0	20.5 ¹	20.6	32.3
Barley.....	24.3	17.8	21.5	17.3	17.6	21.6	16.2	19.2	25.2
Rye.....	15.2	6.7	10.9	7.2	6.9	13.4	6.8 ¹	6.5	16.1
Peas.....	18.3	16.9	17.9	16.3	16.7	17.1	13.3	14.3	16.9
Beans.....	14.6	15.3	17.1	15.1	14.3	18.0	13.7	19.2	16.8
Buckwheat.....	22.2	20.6	22.9	21.3	21.2	20.9	21.7 ¹	19.6	22.4
Mixed grains.....	36.9	33.0	33.0	28.3	32.7	34.3	28.7	32.0	34.6
Flaxseed.....	8.7	3.8	5.9	2.6	4.0	6.9	3.8	2.9	8.8
Corn for husking.....	36.1	41.3	38.9	37.0	42.2	46.3	37.0	32.7	49.3
	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Potatoes.....	84.4	88.0	76.0	81.0	84.0	76.0	79.0	80.0	89.0
Turnips, etc.....	181.8	205.0	216.0	188.0	216.0	190.0	209.0 ¹	195.0	189.0
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1.5	1.6	1.5	1.3	1.3	1.6	1.6	1.5	1.5
Fodder corn.....	8.2	8.6	7.8	8.3	7.7	8.5	7.8 ¹	8.8	9.0
Sugar beets.....	9.0	9.1	10.8	9.9	8.3	8.9	10.7 ¹	9.0	9.4
Alfalfa.....	2.2	2.5	2.7	2.3	2.0	2.6	2.3	2.5	2.4

¹ Revised since the publication of the 1937 Year Book.

Grain Yields of the Prairie Provinces.—Estimates of the acreages and yields of the grain crops of the Prairie Provinces (Manitoba, Saskatchewan, and Alberta) are given for 1937 in Table 9, together with comparative data for 1936 and 1935.

9.—Areas and Yields of Wheat, Oats, Barley, Rye, and Flaxseed in the Prairie Provinces, 1935-37.

Province and Crop.	Areas.			Yields.		
	1935.	1936.	1937.	1935.	1936.	1937.
	acres.	acres.	acres.	bu.	bu.	bu.
Prairie Provinces—						
Wheat.....	23,293,000	24,837,800	24,599,000	264,096,000	202,000,000 ¹	159,000,000
Oats.....	9,478,000	8,674,300	8,579,000	244,854,000	135,862,000	142,413,000
Barley.....	3,187,000	3,724,100	3,562,300	62,625,000	52,617,000	62,418,000
Rye.....	649,300	561,800	808,200	8,379,000	3,201,000	4,280,000
Flaxseed.....	296,700	468,700	233,300	1,563,400	1,730,000	617,000
Manitoba—						
Wheat.....	2,587,000	2,556,600	2,872,000	23,250,000	26,000,000 ¹	48,000,000
Oats.....	1,434,000	1,453,400	1,410,000	30,700,000	20,400,000	43,075,000
Barley.....	1,121,000	1,423,000	1,393,000	23,100,000	18,990,000	34,800,000
Rye.....	107,000	88,300	135,200	1,816,000	950,000	2,460,000
Flaxseed.....	17,300	89,100	38,300	158,400	415,000	370,000
Saskatchewan—						
Wheat.....	13,206,000	14,744,000	13,893,000	142,198,000	110,000,000 ¹	37,000,000
Oats.....	4,942,000	4,684,200	4,380,000	131,951,000	65,462,000	22,338,000
Barley.....	1,146,000	1,302,100	1,174,000	23,149,000	16,627,000	5,518,000
Rye.....	374,200	336,100	518,000	4,967,000	1,489,000	635,000
Flaxseed.....	260,000	366,200	175,000	1,250,000	1,240,000	123,000
Alberta—						
Wheat.....	7,500,000	7,537,200	7,834,000	98,648,000	66,000,000 ¹	74,000,000
Oats.....	3,102,000	2,536,700	2,789,000	82,203,000	50,000,000	77,000,000
Barley.....	920,000	999,000	995,300	16,376,000	17,000,000	22,100,000
Rye.....	168,100	137,400	155,000	1,596,000	762,000	1,185,000
Flaxseed.....	19,400	13,400	20,000	155,000	75,000	124,000

¹ Revised since the publication of the 1937 Year Book.

Stocks of Grain in Canada.—Table 10 shows the quantities of grain in farmers' hands on July 31, 1937, as compared with July 31, 1936 and 1935. Adding the stocks in elevators, in flour-mills and in transit, Table 11 shows the total quantities of grain in store at the close of each of the crop years ended July 31, 1935, 1936, and 1937.

10.—Stocks of Grain in Farmers' Hands on July 31, 1937, as Compared with July 31, 1936 and 1935, with Totals of Production of the Previous Years' Crops.

Kind of Grain.	Total Pro- duction in 1934.	On Farms, July 31, 1935.		Total Pro- duction in 1935.	On Farms, July 31, 1936.		Total Pro- duction in 1936.	On Farms, July 31, 1937.	
	'000 bu.	p.c.	bu.	'000 bu.	p.c.	bu.	'000 bu.	p.c.	bu.
Wheat.....	275,849	2-85	7,861,000	281,935	1-96 ¹	5,520,000	229,218	1-74	3,999,300
Oats.....	321,120	6-25	20,071,000	394,348	7-91	31,186,000	271,778	5-60	15,231,000
Barley.....	63,742	3-17	2,022,000	83,975	5-00	4,199,200	71,922	2-05	1,476,400
Rye.....	5,423	1-44	77,900	9,606	2-82	270,600	4,281	1-83	78,400
Flaxseed.....	910	0-46	4,200	1,666	0-52 ¹	7,600	1,795	0-55	9,800

¹ Revised since the publication of the 1937 Year Book.

11.—Detailed Stocks of Grain in Canada on July 31, 1935, 1936, and 1937.

Item.	Wheat.			Oats.		
	1935.	1936.	1937.	1935.	1936.	1937.
	bu.	bu.	bu.	bu.	bu.	bu.
Held in—						
Farmers' hands.....	7,861,200	5,520,000	3,999,300	20,071,000	31,186,000	15,231,000
Country, private, and mill elevators and mills in Western Division.....	53,857,630	36,242,730	7,427,392	1,430,847	4,161,502	1,395,430
Terminal elevators in West- ern Inspection Division..	83,825,528	37,290,332	11,752,253	3,786,402	2,523,253	588,276
Eastern elevators.....	42,764,795	22,368,381	5,980,927	589,803	1,198,655	395,986
Flour-mills (eastern).....	898,819 ¹	1,728,255 ¹	770,593	251,180 ¹	299,981 ¹	215,185
Transit.....	12,939,610	4,944,579	2,809,387	310,077	935,306	452,931
Totals.....	202,147,582¹	108,094,277¹	32,739,852	26,439,309¹	40,304,697¹	18,278,808
Item.	Barley.			Rye.		
	1935.	1936.	1937.	1935.	1936.	1937.
	bu.	bu.	bu.	bu.	bu.	bu.
Held in—						
Farmers' hands.....	2,022,000	4,199,200	1,476,400	77,900	270,600	78,400
Country, private, and mill elevators and mills in Western Division.....	1,239,433	2,957,629	970,789	240,450	1,077,542	70,768
Terminal elevators in West- ern Inspection Division..	1,035,973	1,352,626	966,744	2,167,954	1,354,261	99,771
Eastern elevators.....	900,893	761,969	341,030	439,334	367,111	5,394
Flour-mills (eastern).....	46,245 ¹	24,292 ¹	88,210	305 ¹	14,225	2,716
Transit.....	285,516	531,915	520,062	184,260	110,630	152,653
Totals.....	5,530,060¹	9,827,631¹	4,363,235	3,110,203¹	3,194,369	409,702
Item.	Flaxseed.					
	1935.	1936.	1937.			
	bu.	bu.	bu.			
Held in—						
Farmers' hands.....	4,200	7,600	9,800			
Country, private, and mill elevators and mills in Western Division	105,091	109,541	112,796			
Terminal elevators in Western Inspection Division.....	177,404	136,540	312,572			
Eastern elevators.....	Nil	Nil	2,115			
Flour-mills (eastern).....	335	90	66			
Transit.....	25,949	15,516	27,618			
Totals.....	312,979	269,287	464,967			

¹ Revised since the publication of the 1937 Year Book.

Distribution of Wheat and Oat Crops.—The distribution of the wheat crops of Canada for the years ended July 31, 1936 and 1937, is calculated in Table 12.

12.—Distribution of the Canadian Wheat Crops, by crop years, 1935-36 and 1936-37.

NOTE.—Flour is expressed as wheat on the basis of one barrel of flour, weighing 196 lb., being equal to 4½ bushels of wheat. For similar calculations extending over a series of years both for wheat and oats, see the Year Book, 1920, pp. 263-266, and the April issues of the Monthly Bulletin of Agricultural Statistics for each of the years 1920 to 1933. For 1934 and later years, preliminary estimates will be found in the August numbers of the Bulletin.

Item.	Crop Year ended July 31, 1936.	Crop Year ended July 31, 1937.	Item.	Crop Year ended July 31, 1936.	Crop Year ended July 31, 1937.
	'000 bu.	'000 bu.		'000 bu.	'000 bu.
Carry-overs, Aug. 1, 1935, and Aug. 1, 1936.....	203,273	108,094	Exports as flour.....	22,405	20,365
Gross production.....	281,935	219,218	Totals, exports.....	254,425	195,223
Loss in cleaning.....	4,300	2,500	Retained as seed.....	33,487	34,112
Grain not merchantable...	9,869	1,515	Retained for feed.....	20,939	15,794
Net production and carry- overs.....	471,039	323,297	Milled for food.....	44,815	43,549
Imports.....	292	403	Carry-overs, July 31, 1936 and July 31, 1937.....	108,094 ¹	32,740
Available for distribution...	471,331	323,700	Balances otherwise dis- posed of.....	8,229	2,282
Exports as grain.....	232,020	174,858			

¹ Revised since the publication of the 1937 Year Book.

Table 13 presents similar data for oats. The bulk of this crop is consumed as feed for live stock and the table shows approximately how the remaining portion of the crop is disposed of, including: the quantities exported as grain, oatmeal, and rolled oats; the quantities retained for seed; and the quantities milled for home consumption, representing chiefly oatmeal and rolled oats used for human food. The carry-over represents grain in the elevators, in farmers' hands, in transit, etc., and the balance is the quantity used in Canada, for feeding to live stock, this amount being estimated at 312,627,000 bushels in 1935-36 and 235,449,000 bushels in 1936-37.

13.—Distribution of the Canadian Oat Crops, by crop years, 1935-36 and 1936-37.

Item.	Crop Year ended July 31, 1936.	Crop Year ended July 31, 1937.	Item.	Crop Year ended July 31, 1936.	Crop Year ended July 31, 1937.
	'000 bu.	'000 bu.		'000 bu.	'000 bu.
Carry-overs, Aug. 1, 1935, and Aug. 1, 1936.....	26,471	40,305	Exports as meal, etc.....	3,533	3,503
Gross production.....	394,348	271,778	Totals, exports.....	15,514	9,500
Grain not merchantable...	11,323	8,509	Retained as seed.....	32,796	32,621
Net production and carry- overs.....	409,496	303,574	Milled for home consump- tion.....	8,535	7,749
Imports.....	356	24	Carry-overs, July 31, 1936 and July 31, 1937.....	40,305 ¹	18,279
Available for distribution...	409,852	303,598	Balances for home con- sumption as grain.....	312,627	235,449
Exports as grain.....	11,981	5,997			

¹ Revised since the publication of the 1937 Year Book.

Per Capita Consumption of Wheat in Canada.—According to calculations, the average annual per capita consumption of wheat ground for human food in Canada during the ten years 1928 to 1937 was 4.1 bushels. The range for the period was between 3.9 and 4.4 bushels. The per capita consumption in 1937 was

estimated at 3.9 bushels. Details for the years 1919-27 were given at p. 241 of the 1929 Year Book. Annual estimates are published in the April number of the Monthly Bulletin of Agricultural Statistics.

Subsection 3.—Farm Live Stock and Poultry.

The growth of the live-stock and poultry industries in Canada from decade to decade is indicated in summary statistical form in Table 14.

14.—Summary Statistics of the Numbers of Live Stock and Poultry on Farms in the Dominion of Canada, Censuses of 1871-1931.

Item.	1871.	1881.	1891.	1901.	1911.	1921. ¹	1931.
Horses.....	836,743	1,059,358	1,470,572	1,577,493	2,598,958	3,610,494	3,113,909
Cattle.....	2,624,290	3,433,989	4,120,586	5,576,451	6,526,083	8,519,484	7,973,031
Sheep.....	3,155,509	3,048,678	2,563,781	2,510,239	2,174,300	3,203,966	3,627,116
Swine.....	1,366,083	1,207,619	1,733,850	2,353,828	3,634,778	3,040,730	4,699,831
All poultry.....	²	²	14,105,102 ³	17,922,658	31,793,261	50,325,248	65,184,689 ⁴
Hens and chickens...	—	—	12,696,701	16,651,337	29,773,457	48,021,647	61,277,229
Turkeys.....	—	—	458,306	584,569	863,182	1,096,721	2,223,197
Ducks.....	—	—	320,169	290,755	527,098	603,152	749,930
Geese.....	—	—	537,932	395,997	629,524	603,728	902,251
Hives of bees..	144,791	—	199,288	189,986	180,372	185,530	215,349

¹ Includes live stock elsewhere than on farms as follows: horses 158,742; cattle 149,995; sheep 3,490; swine 80,439; poultry 6,978,054; hives 37,425.

² Poultry not reported for this census.

³ Includes 91,994 unspecified.

⁴ Includes 32,082 other poultry.

15.—Numbers and Values of Farm Live Stock in Canada, by Provinces, as at June 1, 1934-37.

NOTE.—The figures for Canada and for the Prairie Provinces have been revised since the publication of the 1937 Year Book.

Province and Item.	Numbers.				Values.			
	1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.
					\$'000	\$'000	\$'000	\$'000
Canada—								
Horses.....	2,933,492	2,931,337	2,891,540	2,882,990	168,132	189,341	208,170	206,957
Milch cows.....	3,864,200	3,849,200	3,885,300	3,940,400	110,721	134,000	143,316	156,467
Other cattle.....	5,087,700	4,971,400	4,955,300	4,900,100	84,657	107,152	112,247	123,731
Sheep.....	3,421,100	3,399,100	3,327,100	3,339,900	14,298	17,055	18,077	18,741
Swine.....	3,654,000	3,549,200	4,145,000	3,963,300	36,029	41,778	45,488	48,802
Totals.....	—	—	—	—	413,837	489,326	527,298	554,689
P.E. Island—								
Horses.....	27,430	27,920	27,600	28,800	2,085	2,289	2,484	2,621
Milch cows.....	46,300	47,000	45,600	46,100	1,158	1,457	1,596	1,706
Other cattle.....	50,500	48,600	47,100	53,400	758	1,021	1,130	1,282
Sheep.....	54,100	50,200	48,800	49,600	216	272	248	275
Swine.....	31,500	38,300	41,800	43,900	288	468	481	463
Totals.....	—	—	—	—	4,505	5,507	5,939	6,347
Nova Scotia—								
Horses.....	41,900	41,110	40,380	42,500	3,478	3,618	3,796	4,335
Milch cows.....	124,100	116,500	114,300	115,700	3,351	3,845	4,343	4,859
Other cattle.....	120,300	106,600	99,600	113,200	1,925	2,239	2,390	3,170
Sheep.....	145,300	132,800	134,900	137,600	545	587	634	718
Swine.....	41,600	39,700	43,300	50,000	443	521	611	715
Totals.....	—	—	—	—	9,742	10,810	11,774	13,797

15.—Numbers and Values of Farm Live Stock in Canada, by Provinces, as at June 1, 1934-37—concluded.

Province and Item.	Numbers.				Values.			
	1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.
					\$'000	\$'000	\$'000	\$'000
New Brunswick—								
Horses.....	51,200	51,170	49,490	52,300	4,454	5,373	5,493	5,962
Milch cows.....	114,500	113,600	110,000	111,400	3,206	3,522	3,960	4,010
Other cattle.....	112,200	94,300	88,600	103,100	1,683	1,603	1,861	2,165
Sheep.....	113,900	110,900	108,800	107,100	456	500	542	560
Swine.....	70,800	79,200	82,100	95,200	874	1,157	1,302	1,431
Totals.....	-	-	-	-	10,673	12,155	13,158	14,128
Quebec—								
Horses.....	264,500	266,600	270,600	279,900	28,302	31,992	30,307	32,748
Milch cows.....	947,000	936,300	938,900	962,400	27,463	31,834	35,678	41,383
Other cattle.....	778,600	725,900	757,500	801,700	10,122	11,614	16,665	19,241
Sheep.....	612,000	666,800	654,100	658,000	2,448	3,334	3,427	3,665
Swine.....	551,400	611,200	704,200	773,900	7,168	8,557	7,535	10,835
Totals.....	-	-	-	-	75,503	87,331	93,612	107,872
Ontario—								
Horses.....	563,700	562,900	562,900	557,900	45,660	51,787	59,105	57,464
Milch cows.....	1,176,800	1,181,800	1,181,500	1,175,900	37,658	49,636	54,349	56,443
Other cattle.....	1,317,700	1,287,400	1,292,700	1,278,300	28,989	37,335	38,781	40,906
Sheep.....	962,300	945,700	886,500	874,700	5,042	5,731	6,206	6,088
Swine.....	1,177,900	1,225,300	1,408,300	1,487,900	11,779	14,887	16,379	18,450
Totals.....	-	-	-	-	129,128	159,376	174,820	179,351
Manitoba—								
Horses.....	296,000	297,000	304,400	324,700	14,504	16,038	18,873	20,781
Milch cows.....	339,100	329,800	327,900	390,400	7,799	9,894	9,509	12,493
Other cattle.....	455,700	429,700	419,500	456,600	6,380	8,594	8,810	10,958
Sheep.....	216,000	218,000	207,900	216,200	754	970	1,017	1,096
Swine.....	242,000	183,500	269,700	228,900	2,255	2,004	3,015	2,747
Totals.....	-	-	-	-	31,692	37,500	41,224	48,075
Saskatchewan—								
Horses.....	932,200	933,800	898,300	873,600	39,152	45,756	50,305	46,301
Milch cows.....	556,000	553,900	591,100	563,700	13,344	15,509	15,960	15,784
Other cattle.....	948,500	932,300	943,900	877,500	13,279	17,714	16,990	17,550
Sheep.....	448,200	459,700	342,300	345,000	1,479	1,903	1,499	1,628
Swine.....	596,400	514,400	666,800	454,100	5,129	5,478	6,861	5,036
Totals.....	-	-	-	-	72,383	86,360	91,615	86,299
Alberta—								
Horses.....	698,300	691,300	677,000	661,200	27,234	29,035	33,850	32,399
Milch cows.....	461,700	464,200	458,200	453,600	12,004	12,998	11,913	13,608
Other cattle.....	1,108,500	1,140,000	1,095,900	1,003,700	16,628	21,660	19,726	22,081
Sheep.....	696,200	639,600	765,900	768,500	2,492	2,737	3,454	3,566
Swine.....	896,100	809,100	877,800	773,700	7,572	8,140	8,655	8,410
Totals.....	-	-	-	-	65,930	74,570	77,598	80,064
British Columbia—								
Horses.....	58,262	59,537	60,870	62,090	3,263	3,453	3,957	4,346
Milch cows.....	98,700	106,100	117,800	121,200	4,738	5,305	6,008	6,181
Other cattle.....	195,700	206,600	210,500	212,600	4,893	5,372	5,894	6,378
Sheep.....	173,100	175,400	177,900	183,200	866	1,021	1,050	1,145
Swine.....	46,300	48,500	51,000	55,700	521	566	649	715
Totals.....	-	-	-	-	14,281	15,717	17,558	18,765

16.—Average Values per Head of Farm Live Stock in Canada, as Estimated by Crop Correspondents, 1935-37.

NOTE.—Figures for 1925-34 will be found at pp. 272-273 of the 1934-35 Year Book.

Province and Item.	1935.	1936.	1937.	Province and Item.	1935.	1936.	1937.
	\$	\$	\$		\$	\$	\$
Canada—				Ontario—			
Horses.....	65	72	72	Horses.....	92	105	103
Milch cows.....	35	37	40	Milch cows.....	42	46	48
Other cattle.....	22	23	25	Other cattle.....	29	30	32
All cattle.....	27	29	32	All cattle.....	35	38	40
Sheep.....	5-02	5-42	5-61	Sheep.....	6-06	7-00	6-96
Swine.....	11-77	10-98	12-31	Swine.....	12-15	11-63	12-40
Prince Edward Island—				Manitoba—			
Horses.....	82	90	91	Horses.....	54	62	64
Milch cows.....	31	35	37	Milch cows.....	30	29	32
Other cattle.....	21	24	24	Other cattle.....	20	21	24
All cattle.....	26	29	30	All cattle.....	24	24	28
Sheep.....	5-41	5-08	5-55	Sheep.....	4-45	4-89	5-07
Swine.....	12-23	11-50	10-55	Swine.....	10-92	11-18	12-00
Nova Scotia—				Saskatchewan—			
Horses.....	88	94	102	Horses.....	49	56	53
Milch cows.....	33	38	42	Milch cows.....	28	27	28
Other cattle.....	21	24	23	Other cattle.....	19	18	20
All cattle.....	27	31	35	All cattle.....	22	21	23
Sheep.....	4-42	4-70	5-22	Sheep.....	4-14	4-38	4-72
Swine.....	13-12	14-10	14-30	Swine.....	10-65	10-25	11-09
New Brunswick—				Alberta—			
Horses.....	105	111	114	Horses.....	42	50	49
Milch cows.....	31	36	36	Milch cows.....	28	26	30
Other cattle.....	17	21	21	Other cattle.....	19	18	22
All cattle.....	25	29	29	All cattle.....	22	20	24
Sheep.....	4-51	4-98	5-23	Sheep.....	4-28	4-51	4-64
Swine.....	14-61	15-86	15-03	Swine.....	10-06	9-86	10-87
Quebec—				British Columbia—			
Horses.....	120	112	117	Horses.....	58	65	70
Milch cows.....	34	38	43	Milch cows.....	50	51	51
Other cattle.....	16	22	24	Other cattle.....	26	28	30
All cattle.....	26	31	34	All cattle.....	34	36	38
Sheep.....	5-00	5-24	5-57	Sheep.....	5-82	5-90	6-25
Swine.....	14-00	10-70	14-00	Swine.....	11-66	12-73	12-84

17.—Numbers and Values of Farm Poultry in Canada, by Provinces, as at June 1, 1936 and 1937.

Province and Item.	No.	Average Value per Head.	Total Value.	Province and Item.	No.	Average Value per Head.	Total Value.
		\$	\$			\$	\$
Canada—				P. E. Island—			
Hens and chickens.....1936	55,769,300 ¹	0-63	35,040,000 ¹	Hens and chickens.....1936	851,600	0-68	579,000
1937	53,982,900	0-69	37,335,000	1937	826,200	0-72	595,000
Turkeys.....1936	2,044,700 ¹	1-77	3,623,000 ¹	Turkeys.....1936	11,800	1-83	22,000
1937	1,997,900	1-90	3,804,000	1937	11,800	1-89	22,000
Geese.....1936	854,900 ¹	1-36	1,165,000 ¹	Geese.....1936	28,100	1-21	34,000
1937	874,900	1-44	1,259,000	1937	26,300	1-36	36,000
Ducks.....1936	670,500 ¹	0-80	538,000 ¹	Ducks.....1936	15,800	0-71	11,000
1937	654,400	0-85	556,000	1937	13,900	0-81	11,000
Totals, Canada—1936	59,339,400¹	—	40,366,000¹	Totals, P.E.I....1936	907,300	—	646,000
1937	57,510,100	—	42,954,000	1937	878,200	—	664,000

For footnote, see end of table, p. 254.

17.—Numbers and Values of Farm Poultry in Canada, by Provinces, as at June 1, 1936 and 1937—concluded.

Province and Item.	No.	Average Value per Head.	Total Value.	Province and Item.	No.	Average Value per Head.	Total Value.
		\$	\$			\$	\$
Nova Scotia—				Manitoba—			
Hens and chickens.....	1936 1,235,500	0.75	927,000	Hens and chickens.....	1936 4,255,500 ¹	0.53	2,255,000 ¹
	1937 1,211,600	0.73	884,000		1937 3,832,000	0.58	2,223,000
Turkeys.....	1936 14,500	2.38	35,000	Turkeys.....	1936 380,000 ¹	1.69	642,000 ¹
	1937 15,700	2.23	35,000		1937 392,600	1.86	730,000
Geese.....	1936 11,500	1.81	21,000	Geese.....	1936 55,900 ¹	1.08	60,000 ¹
	1937 11,700	1.78	21,000		1937 72,500	1.19	86,000
Ducks.....	1936 7,100	0.97	7,000	Ducks.....	1936 37,400 ¹	0.64	24,000 ¹
	1937 5,100	0.91	5,000		1937 35,900	0.69	25,000
Totals, N.S.....	1936 1,268,600	—	990,000	Totals, Man.....	1936 4,728,800¹	—	2,981,000¹
	1937 1,244,100	—	945,000		1937 4,333,000	—	3,064,000
New Brunswick—				Saskatchewan—			
Hens and chickens.....	1936 1,314,800	0.77	1,012,000	Hens and chickens.....	1936 8,862,300 ¹	0.45	3,988,000 ¹
	1937 1,289,900	0.83	1,071,000		1937 8,116,000	0.44	3,577,000
Turkeys.....	1936 28,800	2.60	75,000	Turkeys.....	1936 587,400 ¹	1.51	887,000 ¹
	1937 26,600	2.52	67,000		1937 524,000	1.56	817,000
Geese.....	1936 15,300	1.72	26,000	Geese.....	1936 113,100 ¹	0.99	112,000 ¹
	1937 14,300	1.68	24,000		1937 111,100	1.01	112,000
Ducks.....	1936 8,300	1.09	9,000	Ducks.....	1936 72,000 ¹	0.60	43,000 ¹
	1937 8,500	1.14	10,000		1937 74,200	0.59	44,000
Totals, N.B.....	1936 1,367,200	—	1,122,000	Totals, Sask....	1936 9,634,800¹	—	5,030,000¹
	1937 1,339,300	—	1,172,000		1937 8,825,300	—	4,544,000
Quebec—				Alberta—			
Hens and chickens.....	1936 7,459,900	0.66	4,924,000	Hens and chickens.....	1936 6,307,200 ¹	0.42	2,649,000 ¹
	1937 7,362,300	0.88	6,479,000		1937 6,161,100	0.45	2,772,000
Turkeys.....	1936 127,400	2.20	280,000	Turkeys.....	1936 430,300 ¹	1.40	602,000 ¹
	1937 110,700	2.46	272,000		1937 444,500	1.60	711,000
Geese.....	1936 72,100	1.40	101,000	Geese.....	1936 97,500 ¹	0.92	90,000 ¹
	1937 61,100	1.63	100,000		1937 123,000	1.01	124,000
Ducks.....	1936 80,300	0.88	71,000	Ducks.....	1936 63,800 ¹	0.54	34,000 ¹
	1937 69,000	0.95	66,000		1937 64,900	0.59	38,000
Totals, Que.	1936 7,739,700	—	5,376,000	Totals, Alta....	1936 6,898,800¹	—	3,375,000¹
	1937 7,603,100	—	6,917,000		1937 6,793,500	—	3,645,000
Ontario—				British Columbia—			
Hens and chickens.....	1936 21,723,600	0.74	16,075,000	Hens and chickens.....	1936 3,758,900	0.70	2,631,000 ¹
	1937 21,314,300	0.79	16,838,000		1937 3,869,500	0.75	2,902,000
Turkeys.....	1936 428,100	2.31	989,000	Turkeys.....	1936 36,400	2.50	91,000
	1937 425,400	2.42	1,029,000		1937 46,600	2.60	121,000
Geese.....	1936 452,000	1.56	705,000	Geese.....	1936 9,400	1.73	16,000
	1937 446,200	1.66	741,000		1937 8,700	1.77	15,000
Ducks.....	1936 354,600	0.87	309,000	Ducks.....	1936 31,200	0.95	30,000
	1937 350,300	0.93	326,000		1937 32,600	0.95	31,000
Totals, Ont.....	1936 22,958,300	—	18,078,000	Totals, B.C.....	1936 3,835,900	—	2,768,000
	1937 22,536,200	—	18,934,000		1937 3,957,400	—	3,069,000

¹ Revised since the publication of the 1937 Year Book.

Production and Value of Wool.—The production of wool in Canada is placed at 18,946,000 lb. from 3,315,500 sheep and lambs in 1937 as compared with 18,929,000 lb. from 3,327,100 sheep and lambs in 1936. Table 18 gives the total estimated production and value of wool for the years 1928 to 1937.

18.—Estimated Quantities and Values of Canadian Wool Clip, 1928-37.

(Excluding Indian Reserves.)

Year.	Sheep.	Production of Wool.	Average Price per lb. of Wool.	Value.
	No.	lb.	cts.	\$
1928.....	3,415,788	19,593,443	20	5,090,000
1929.....	3,728,309	21,218,000	20	4,470,000
1930.....	3,696,000	21,000,000	12	2,311,000
1931.....	3,608,000	20,365,000	8	1,644,000
1932.....	3,645,000	20,503,000	5	1,093,000
1933.....	3,385,800	19,253,000	10	2,005,000
1934.....	3,421,100	19,528,000	10	1,899,000
1935.....	3,399,100	19,357,000	12	2,232,000
1936.....	3,327,100 ¹	18,929,000 ¹	15 ¹	2,782,000
1937.....	3,315,500	18,946,000	16	2,972,000

¹ Revised since the publication of the 1937 Year Book.

Egg Production.—Table 19 gives the estimated numbers of egg-producing hens, quantities of eggs produced, prices and values, by provinces, for the years 1935 to 1937, inclusive. The data for egg-laying hens were calculated from the numbers of mature birds shown in the June surveys, with reductions to allow for cocks and cockerels. The production of eggs per hen and the average prices shown in the table were made with the assistance and advice of extension workers and poultrymen connected with the provincial Departments of Agriculture.

19.—Annual Production and Value of Farm Eggs in Canada, by Provinces, 1935-37.

Province.	Year.	Number of Laying Hens.	Production of Eggs per Hen.	Number of Eggs Produced.	Price Per Dozen.	Value.
				doz.	cts.	\$
Prince Edward Island.....	1935	480,000	91	3,640,000	17	619,000
	1936	448,000	92	3,435,000	18	618,000
	1937	428,000	91	3,246,000	17	552,000
Nova Scotia.....	1935	575,000	91	4,360,000	22	959,000
	1936	527,000	92	4,040,000	23	929,000
	1937	519,000	93	4,022,000	21	845,000
New Brunswick.....	1935	619,000	95	4,900,000	20	980,000
	1936	598,000	94	4,684,000	21	984,000
	1937	573,000	94	4,489,000	20	898,000
Quebec.....	1935	3,280,000	112	30,613,000	19	5,816,000
	1936	3,428,000	114	32,566,000	20	6,513,000
	1937	3,431,500	116	33,166,000	19	6,302,000
Ontario.....	1935	8,265,000	119	81,961,000	19	15,573,000
	1936	8,286,000	121	83,550,000	21	17,545,000
	1937	8,210,000	120	82,100,000	19-5	16,010,000
Manitoba.....	1935	1,937,000	104	16,787,000	14-5	2,434,000
	1936	1,896,000 ¹	104	16,432,000 ¹	15-5	2,547,000 ¹
	1937	1,915,000	194	16,517,000	15	2,490,000
Saskatchewan.....	1935	5,208,000	99	42,966,000	12-5	5,371,000
	1936	4,365,000	99	36,011,000 ¹	13-5	4,861,000 ¹
	1937	4,330,000	98	35,362,000	13-5	4,774,000
Alberta.....	1935	3,025,000	101	25,460,000	12-5	3,183,000
	1936	2,757,000	100	22,975,000	13	2,987,000
	1937	2,972,000	99	24,519,000	12	2,942,000
British Columbia.....	1935	1,205,000	128	12,853,000	22	2,828,000
	1936	1,493,000	127	15,801,000	24	3,792,000
	1937	1,483,000	129	15,942,000	23	3,667,000
Totals.....	1935	24,594,000	109	223,540,000	17	37,763,000
	1936	23,798,000¹	111¹	219,494,000¹	18-5¹	40,776,000¹
	1937	23,861,000	110	219,443,000	17-5	38,480,000

¹ Revised since the publication of the 1937 Year Book.

Subsection 4.—Dairying Statistics.

The dairy industry is dealt with under the following headings: total milk production; butter and cheese; miscellaneous factory products; and, finally, the total value of the dairy production of Canada. For the year 1937 preliminary estimates have been made which will be revised when annual returns are available.

Total Milk Production.—The data presented in Table 20 represent the quantities of dairy products expressed in terms of milk. The total milk production for 1937 is estimated at 17,188,617,700 lb., an increase of 190,202,200 lb. or 1.12 p.c. over the previous year.

All products contributed to the increase in the total milk production of Canada between 1936 and 1937 except butter, the amount of milk used in the manufacture of dairy butter having decreased by 22,060,000 lb. and in that of creamery butter by 106,387,200 lb.

20.—Dairy Production of Canada Expressed in Pounds of Milk, 1926-37, and by Provinces, 1937.

Province.	Total Milk Production.	Made into Butter.		Made into Cheese.		Miscellaneous Factory Products. ¹	Whole Milk Otherwise Used.
		Dairy.	Creamery.	Farm-Made.	Factory.		
	lb.	lb.	lb.	lb.	lb.	lb.	lb.
Totals, 1926	14,591,873,000	2,223,950,000	4,148,469,000	5,788,000	1,923,394,000	254,072,000	6,036,200,000
1927.....	14,825,821,000	2,223,950,000	4,143,077,000	4,653,000	1,546,237,000	287,417,000	6,629,487,000
1928.....	14,512,899,000	2,106,900,000	3,933,513,000	4,873,000	1,619,348,000	296,254,000	6,552,011,000
1929.....	14,349,023,000	2,060,050,000	3,998,667,000	5,490,000	1,329,959,000	307,725,000	6,647,102,000
1930.....	15,126,459,000	2,283,152,000	4,348,431,000	9,115,000	1,333,977,000	312,809,000	6,838,984,000
1931.....	15,772,852,000	2,418,488,000	5,289,612,000	10,095,000	1,276,315,000	252,532,000	6,523,810,000
1932.....	15,917,868,000	2,503,381,000	5,009,790,000	11,503,000	1,349,872,000	219,571,000	6,823,751,000
1933.....	16,048,724,900	2,492,799,000	5,132,233,800	10,565,400	1,244,840,700	243,716,000	6,924,570,000
1934.....	16,329,285,400	2,573,186,000	5,498,082,300	11,372,400	1,112,682,400	259,459,300	6,874,503,000
1935 ²	16,527,913,300	2,672,530,000	5,639,909,100	13,805,400	1,124,786,700	290,197,100	6,786,685,000
1936 ²	16,998,415,500	2,669,356,000	5,874,312,900	13,766,400	1,334,183,000	316,772,200	6,799,025,000
1937.³							
P. E. Island.....	152,453,500	40,546,000	49,505,000	3,400	5,107,100	628,000	56,664,000
Nova Scotia.....	485,742,900	151,111,000	137,511,900	224,000	Nil	17,449,000	179,447,000
New Brunswick..	419,095,000	146,547,000	84,832,800	56,000	6,688,200	4,264,000	176,707,000
Quebec.....	4,544,094,900	339,304,000	1,734,295,700	2,867,000	333,594,200	25,102,000	2,108,932,000
Ontario.....	6,770,145,300	734,255,000	1,901,533,000	1,478,000	1,033,265,300	287,160,000	2,812,454,000
Manitoba.....	1,170,865,400	238,782,000	569,881,000	1,885,000	32,747,400	8,731,000	318,839,000
Saskatchewan.....	1,603,618,700	566,522,000	551,819,100	2,845,000	3,846,600	5,963,000	472,623,000
Alberta.....	1,488,400,800	365,196,000	616,234,600	3,595,000	20,592,200	8,813,000	473,970,000
British Columbia	554,201,200	65,033,000	122,312,600	846,000	2,735,600	60,120,000	303,154,000
Totals, 1937	17,188,617,700	2,647,296,000	5,767,925,700	13,799,400	1,438,576,600	418,230,000	6,902,790,000

¹ The data in this column for 1933-37 include the ice cream made in specialized ice-cream plants and confectionery establishments. ² Figures for 1935 and 1936 have been revised since the publication of the 1937 Year Book. ³ Subject to revision.

Butter and Cheese.—The butter output of creameries in 1937 was 246,387,300 lb., a decrease of 4,544,477 lb., or 1.81 p.c., from the record production of 1936. Dairy butter production also decreased slightly, the 1937 production being 942,000 lb., or 0.83 p.c. under that of 1936. The maximum export of butter was in the year ended June 30, 1903, when 34,128,944 lb. were exported. In the calendar year 1937 the exports were 4,096,600 lb. and the imports were 65,918 lb. The apparent consumption of butter in 1937 is estimated at 363,759,626 lb., or 32.71 lb. per capita, as compared with 355,885,234 lb., or 32.27 lb. per capita in 1936.

The quantity of factory cheese made in Canada during 1937 is estimated at 128,444,300 lb., an increase of 9,320,817 lb. or 7·82 p.c. Cheese made on farms is estimated at 1,232,300 lb., an increase of 3,000 lb. Since 1926, as shown in Table 21, there has been a significant reduction in cheese manufacturing. The decrease recorded between 1933 and 1934 was greater than that shown between 1932 and 1933, but the most outstanding decline occurred in 1927 and a lesser decline in 1929. The increase in factory cheese production which took place between 1935 and 1937 was more than sufficient to cover the 21,177,626 lb. decline which occurred between 1932 and 1934. In 1868 the quantity of cheese exported from Canada was 6,141,570 lb.; in 1904 a maximum exportation of 233,980,716 lb. was reached. For the calendar year 1937, the exports were 88,955,300 lb. The apparent consumption of cheese in 1937 was 39,287,906 lb., or 3·53 lb. per capita compared with 40,239,072 lb., or 3·65 lb. per capita in the previous year. It will be seen that the domestic consumption as shown in 1937 represented only 30·30 p.c. of the total cheese production of the Dominion.

21.—Production of Butter and Cheese in Canada, 1926-37, and by Provinces, 1937.

Year and Province.	Dairy Butter.	Creamery Butter.	Total Butter.	Farm-Made Cheese.	Factory Cheese.	Total Cheese.
	lb.	lb.	lb.	lb.	lb.	lb.
Totals, 1926	95,000,000	177,209,287	272,209,287	516,745	171,731,631	172,248,376
1927	95,000,000	176,978,947	271,978,947	415,417	138,056,908	138,472,325
1928	90,000,000	168,027,039	258,027,039	435,059	144,584,619	145,019,678
1929	88,000,000	170,810,230	258,810,230	490,000	118,746,286	119,236,286
1930	97,529,000	185,751,061	283,280,061	813,000	119,105,203	119,918,203
1931	103,310,000	225,955,246	329,265,246	901,300	113,956,639	114,857,939
1932	106,936,400	214,002,127	320,938,527	1,027,100	120,524,243	121,551,343
1933	106,485,000	219,232,500	325,717,500	943,300	111,146,500	112,089,800
1934	109,918,000	234,852,961	344,770,961	1,011,300	99,346,617	100,357,917
1935 ¹	114,161,999	240,918,799	355,080,798	1,232,148	100,427,390	101,659,538
1936 ¹	114,026,000	250,931,777	364,957,777	1,229,300	119,123,483	120,352,783
1937.²						
Prince Edward Island	1,732,000	2,114,700	3,846,700	300	456,000	456,300
Nova Scotia	6,455,000	5,874,100	12,329,100	20,000	Nil	20,000
New Brunswick	6,260,000	3,623,800	9,883,800	5,000	597,200	602,200
Quebec	14,494,000	74,083,500	88,577,500	256,000	29,785,200	30,041,200
Ontario	31,365,000	81,227,400	112,592,400	132,000	92,255,800	92,387,800
Manitoba	10,200,000	24,343,500	34,543,500	168,000	2,923,900	3,091,900
Saskatchewan	24,200,000	23,571,900	47,771,900	254,000	343,400	597,400
Alberta	15,600,000	26,323,600	41,923,600	321,000	1,838,600	2,159,600
British Columbia	2,778,000	5,224,800	8,002,800	76,000	244,200	320,200
Totals, 1937	113,084,000	246,387,300	359,471,300	1,232,300	128,444,300	129,676,600

¹Revised since the publication of the 1937 Year Book.

² Subject to revision.

Miscellaneous Factory Products.—The production of condensed milk in Canada in 1937 is estimated at 10,861,000 lb. as compared with 7,986,693 lb. in the previous year. Evaporated milk increased from 71,074,564 lb. to 91,054,000 lb. The production of all concentrated whole-milk products amounted to 107,637,000 lb. in 1937 as compared with 81,928,106 lb. in 1936. The production of concentrated milk by-products amounted to 30,279,000 lb. in 1937 (according to provisional figures) of which 18,037,000 lb. was skim-milk powder. In 1936 the production of skim-milk powder was 18,529,982 lb. Thus concentrated whole-milk products increased 31·38 p.c. and concentrated milk by-products increased 8·58 p.c. Ice cream made in factories in 1937 amounted to 6,111,764 gallons as compared with 4,925,767 gallons in 1936, an increase of 24·08 p.c.

22.—Quantities and Values of Miscellaneous Products of Dairy Factories, 1935-37.

Product.	Quantities.			Values.		
	1935.	1936.	1937. ¹	1935.	1936.	1937. ¹
	lb.	lb.	lb.	\$	\$	\$
CONCENTRATED WHOLE-MILK PRODUCTS—						
Condensed milk.....	9,149,309	7,986,693	10,861,000	847,837	724,175	985,000
Evaporated milk.....	66,218,061	71,074,564	91,054,000	4,170,421	4,585,838	5,873,000
Milk powder.....	2,236,904	2,735,745	5,602,000	265,761	351,890	720,000
Cream powder.....	24,109	45,244	36,000	8,666	15,403	12,000
Condensed coffee.....	83,358	85,860	84,000	10,925	11,006	11,000
Totals.....	77,711,741	81,928,106	107,637,000	5,303,610	5,688,312	7,601,000
CONCENTRATED MILK BY-PRODUCTS—						
Condensed skim milk.....	4,386,104	4,515,713	4,766,000	218,906	233,402	246,000
Evaporated skim milk.....	145,988	185,655	1,477,000	3,984	4,889	39,000
Skim-milk powder.....	18,890,048	18,529,782	18,037,000	1,220,511	1,237,059	1,204,000
Condensed buttermilk.....	387,899	921,783	2,386,000	8,065	21,594	56,000
Buttermilk powder.....	2,165,006	2,210,953	2,423,000	105,838	103,936	114,000
Casein.....	1,204,379	1,335,910	998,000	112,323	134,518	101,000
Sugar of milk.....	230,716	186,423	192,000	13,803	11,186	12,000
Totals.....	27,410,140	27,886,219	30,279,000	1,683,430	1,746,584	1,772,000
ICE CREAM ²	4,345,915	4,925,767	6,111,764	5,212,046	5,729,256	7,388,902
SUNDRIES.....	—	—	—	1,256,066	1,225,811	1,590,387

¹ Provisional estimate.² Gallons.

Total Value of Dairy Production.—The value of all dairy products in 1937 is estimated at \$228,403,127 as compared with \$211,421,764 in 1936, an increase of 8.03 p.c. The value of the dairy production of Canada in 1937 was the highest since 1930 and shows an advance of \$69,328,994 or 43.58 p.c. over the low value recorded in 1932. All products increased in value. The prices of creamery butter during the first quarter of 1937 were slightly lower than in the same period of the preceding year; in the summer months June to September, prices were considerably higher but dropped to about the level of 1935 prices for the rest of the year. The value per lb. of creamery butter, as deduced from Tables 21 and 23, represents an average of 23.4 cents in 1937 and 20.8 cents in 1936. Total butter shows a value of \$86,939,300 in 1937, an increase of \$8,351,140 as compared with 1936, while total cheese was valued at \$18,019,327 in 1937, an increase of \$2,291,486.

23.—Value of Dairy Production of Canada, 1926-37, and by Provinces, 1937.

Year.	Dairy Butter.	Creamery Butter.	Farm-Made Cheese.	Factory Cheese.	Misc. Factory Products.	Milk Otherwise Used.	All Products. ¹
	\$	\$	\$	\$	\$	\$	\$
Totals, 1926....	28,252,777	61,753,390	80,240	28,807,841	17,767,271	140,643,460	277,304,979
1927....	30,435,121	65,709,986	70,654	25,522,148	18,879,335	154,257,346	294,874,590
1928....	29,103,000	64,702,538	82,000	30,494,463	20,581,490	152,661,856	297,625,347
1929....	28,929,000	65,929,782	82,800	21,471,330	22,091,945	153,238,000	291,742,857
1930....	27,385,000	56,670,504	115,555	18,089,870	21,074,228	101,230,000	237,068,157
1931....	21,450,000	50,198,878	108,500	12,824,695	16,550,619	78,876,000	191,389,692
1932....	15,311,000	40,475,479	94,120	11,379,922	13,112,612	71,627,000	159,074,133
1933....	16,623,000	43,546,109	94,021	11,127,984	13,804,553	78,016,000	170,828,667
1934....	17,492,000	48,168,600	100,021	9,797,600	15,081,400	84,974,000	183,791,221
1935....	19,237,000 ²	52,228,133	133,023 ²	10,570,309	16,705,958	86,151,000	193,487,123 ²
1936....	20,926,000	57,662,160	162,028	15,565,813	18,070,763	89,431,000	211,421,764

For footnotes, see end of table, p. 259.

23.—Value of Dairy Production of Canada, 1926-37, and by Provinces, 1937—concluded.

Year and Province.	Dairy Butter.	Creamery Butter.	Farm-Made Cheese.	Factory Cheese.	Misc. Factory Products.	Milk Otherwise Used.	All Products. ¹
1937. ²							
Prince Edward Island..	398,000	568,400	27	64,700	52,000	604,000	1,825,127
Nova Scotia.....	1,743,000	1,633,000	2,000	Nil	842,600	2,475,000	7,194,600
New Brunswick.....	1,627,000	951,300	1,000	86,600	344,700	2,095,000	5,505,600
Quebec.....	3,189,000	19,261,700	36,000	4,110,400	2,637,000	26,595,000	58,019,100
Ontario.....	6,900,000	21,444,000	17,000	12,823,600	14,650,000	41,014,000	99,631,600
Manitoba.....	1,989,000	5,842,400	22,000	394,700	802,500	3,180,000	13,362,600
Saskatchewan.....	4,356,000	5,657,300	35,000	50,500	494,900	4,507,000	16,281,700
Alberta.....	2,964,000	6,344,000	42,000	272,100	697,900	5,666,000	17,117,000
British Columbia.....	556,000	1,515,200	19,000	42,700	2,546,900	4,426,000	9,465,800
Totals, 1937.....	23,722,000	63,217,300	174,027	17,845,300	23,068,500	90,562,000	228,403,127

¹ The data in this column include the value of skim milk and buttermilk for the years 1930-37. For all Canada this was \$9,814,000 in 1937 as compared with \$9,604,000 in 1936, \$8,462,000 in 1935, \$8,177,600 in 1934, \$7,617,000 in 1933, \$7,074,000 in 1932, \$11,381,000 in 1931, and \$12,503,000 in 1930. ² Revised since the publication of the 1937 Year Book.

³ Subject to revision.

Apparent Consumption of Butter and Cheese, 1932-37.—The apparent consumption of butter and cheese for the years 1933-37 is shown at pp. 607-608 of this volume (Table 17 of Chapter XVII dealing with Internal Trade). Figures are given for various animal products of the total and per capita consumption calculated from the stocks at the beginning and end of the year, and the production, imports and exports during the year. For the year 1937 the preliminary figures for the consumption of butter and cheese were: butter, total consumption 363,759,626 lb. and per capita consumption 32.71 lb.; and cheese, total, 39,287,906 lb. and per capita 3.53 lb. The per capita consumption of cheese in Canada is small and has not changed materially in the past ten years. In the case of butter, on the other hand, per capita consumption is high, amounting to nearly 10 oz. per person per week in the latest years. There has been a definite increase in per capita consumption in the past ten years and even the depression years 1932 and 1933 did not show an appreciable decline.

Subsection 5.—Horticulture.

The statistical treatment of horticulture is confined to fruit growing, vegetable growing, floriculture, and nursery stock production, all on a commercial scale. Of the several branches of commercial horticulture, fruit and vegetable growing are the most important. In recent years the latter has made remarkable gains and now surpasses fruit growing in total value of production. Vegetables and flowers grown in home gardens for private use probably exceed the volume of commercial production. The processing of fruits and vegetables is an important development closely allied to the production industry. In 1936, the latest year for which complete figures are available, the total value of processed fruits and vegetables, including wine, was almost \$49,000,000.

Apple growing is the mainstay of the fruit industry in Canada, the value of commercial production averaging over \$10,000,000 annually for the years 1926-35. Other fruits cultivated include the pear, peach, plum, cherry, apricot, and grape, together with various berries of which the strawberry is most important. Substantial revenue is derived from the native blueberry and cranberry, the former being abundant over large areas of Eastern Canada, while the cranberry is found chiefly in the Maritime Provinces. Commercial fruit growing is centred mainly in the provinces of Nova Scotia, Ontario, and British Columbia. For a fuller discussion of fruit growing in Canada, the reader is referred to pp. 242-247 of the 1931 edition of the Year Book.

Satisfactory annual statistics of the commercial vegetable-growing industry are not at present available, but important information on the subject is obtained through the decennial census. This material will be found on pp. 254-255 of the 1936 Year Book.

Annual Statistics of Fruit Production.—Table 24 shows the quantities and values of commercial fruit production in Canada for the years 1933-36, inclusive, together with the averages for the two five-year periods, 1926-30 and 1931-35. Statistics of the production for the years 1926-32 were published at p. 258 of the 1937 edition of the Year Book.

24.—Estimated Quantities and Values of Chief Commercial Fruit Production in Canada, 1933-36, with Five-Year Averages, 1926-30 and 1931-35.

Item.		1933.	1934.	1935.	1936.	Averages.	
						1926-30.	1931-35.
Apples.....	bbl.	5,473,230	4,354,430	4,499,900	4,115,200	3,319,489	4,431,264
	\$	10,529,800	9,424,450	11,580,960	9,789,000	10,624,270	9,502,810
Pears.....	bu.	535,900	446,400	476,130	431,300	335,238	448,857
	\$	582,170	598,760	641,285	602,500	582,694	517,084
Peaches.....	bu.	823,350	443,830	619,560	429,900	514,940	719,752
	\$	1,155,000	1,033,600	907,650	658,000	1,141,303	1,035,138
Apricots.....	bu.	34,100	100,770	33,300	1,300	28,710	52,956
	\$	102,300	246,000	90,000	4,042	88,194	135,308
Plums and prunes.....	bu.	246,710	240,230	263,130	158,700	318,614	240,534
	\$	272,000	371,050	356,860	241,700	493,491	292,299
Cherries.....	bu.	236,780	194,675	213,270	186,800	227,450	226,672
	\$	515,680	557,900	556,500	480,300	771,276	540,735
Strawberries.....	qt.	21,943,400	20,242,780	27,505,350	20,579,000	11,340,616	21,499,563
	\$	1,916,600	1,968,070	2,352,000	1,929,100	1,553,284	1,886,443
Raspberries.....	qt.	6,120,440	5,835,460	8,140,260	5,652,000	4,748,574	6,587,456
	\$	756,475	824,450	1,041,170	703,900	805,666	848,723
Loganberries.....	lb.	1,787,440	2,333,360	2,186,000	1,247,400	1,747,602	2,145,966
	\$	72,910	108,340	108,660	68,300	134,840	99,412
Grapes.....	lb.	42,486,200	48,565,000	42,945,500	22,915,000	44,242,000	47,010,748
	\$	653,400	987,100	668,700	495,200	1,657,028	768,049
Totals.....	\$	16,556,335	16,119,720	18,303,785	14,972,042	17,852,046	15,626,001

The Fruit Nursery Industry.—The first commercial nursery in Canada was established near Fonthill, Ontario, and this district still continues to be one of the leading centres of the industry. While the province of Ontario accounts for the

major part of the fruit stock output, there are nurseries distributed through all the provinces and the wholesale value of the product sold during the year ended May 31, 1937, was \$371,777, as compared with \$369,827 in 1936.

25.—Numbers and Values of Fruit Trees, Bushes, and Plants Sold by Nurserymen in Canada, years ended May 31, 1934-37.

Kind of Tree, Bush, or Plant.	Numbers Sold.				Values.			
	1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.
					\$	\$	\$	\$
Apples—								
Early.....	49,932	62,929	82,063	68,725	16,833	24,156	32,115	26,422
Fall.....	51,637	72,212	95,710	67,463	16,980	27,024	36,365	26,690
Winter.....	149,500	209,873	256,959	257,615	50,705	72,970	97,104	96,682
Crab.....	16,767	9,906	12,633	15,675	4,902	3,531	4,226	4,682
Totals, Apples.	267,836	354,920	447,365	409,478	89,420	127,681	169,946 ²	154,476
Pears.....	67,713	60,497	66,156	84,357	29,449	26,762	26,635	34,529
Plums.....	41,630	56,740	62,893	76,974	16,108	23,472	24,870	28,984
Peaches.....	97,387	112,990	204,099	201,271	22,859	26,496	45,884	48,220
Cherries.....	43,318	57,758	64,352	71,230	18,505	26,276	28,696	30,564
Apricots.....	4,414	4,169	5,357	4,724	959	988	1,721 ¹	1,478
Nectarines.....	35	46	103	47	18	23	43	17
Quinces.....	52	87	776	283	26	44	331	136
Blackberries.....	27,432	43,062	56,576	19,601	915	1,810	1,801	802
Currants.....	61,841	60,013	88,343	74,554	5,873	6,147	8,399	6,395
Grapes.....	210,613	168,724	128,004	174,036	20,384	17,257	11,742	13,611
Gooseberries.....	39,672	31,529	35,408	39,467	5,001	4,361	5,116	4,996
Raspberries.....	765,732	948,618	1,145,221 ¹	826,189	26,253	33,246	30,880	26,115
Loganberries.....	411	3,304	2,506	805	57	234	85	48
Strawberries.....	1,164,396	1,683,451	1,971,282	3,315,142	9,525	13,815	13,678	21,406
Totals.....	-	-	-	-	245,352	308,612	369,827 ²	371,777

¹ Revised since the publication of the 1937 Year Book.
not shown.

² Includes crab seedlings valued at \$136

Floriculture.—The total value of floriculture and ornamental nursery stock sold in Canada during the years ended May 31, 1936 and 1937, was \$2,784,172 and \$3,138,126, respectively, as shown by Table 26. Care should be used in making comparisons between 1936 and 1937 figures, as the latter cover a much larger proportion of the industry than do the former. Similarly, the figures for 1936 are more representative than are those collected for earlier years.

26.—Quantities and Values of Floricultural and Ornamental Nursery Stock Grown in Canada and Sold during the years ended May 31, 1936 and 1937.

Description.	1936.		1937.	
	Quantity Sold.	Total Wholesale Value.	Quantity Sold.	Total Wholesale Value.
	No.	\$	No.	\$
Outdoor roses.....	452,161	92,831	518,016	110,542
Ornamental trees (evergreen).....	87,494	144,082	115,354	151,411
Ornamental trees (deciduous).....	88,324	36,351	154,982	57,913
Shrubs for outdoor planting.....	992,279	91,577	1,046,976	101,661
Hardy climbing vines.....	32,782	7,647	30,287	7,848
Herbaceous perennials.....	444,591	49,162	526,176	60,856
Herbaceous biennials.....	27,554	3,724	44,821	3,454
Bedding plants.....	5,337,849	196,250	8,850,977	207,681
Flowering plants for indoor use.....	664,663	258,574	661,925	302,044
Foliage plants for indoor use.....	307,891	79,299	268,037	69,013
Flowering bulbs.....	2,527,440	61,662	2,981,433	66,424
Cut flowers, grown inside.....	43,245,743	1,724,863	51,136,619	1,952,128
Cut flowers, grown outdoors.....	2,294,166	38,150	2,841,242	47,151
Totals.....	-	2,784,172	-	3,138,126

Vegetables.—Census figures of areas, quantities, and values of vegetables produced for sale on farms in Canada, in the years 1920 and 1930, were shown at pp. 254-255 of the 1936 Year Book.

Subsection 6.—Special Agricultural Crops.

Maple Syrup and Sugar.—The Canada Year Book, 1924, contained on pp. 247 and 248 a description of the process of making maple sugar. Table 27 gives the production and value of maple sugar and syrup in Canada for the years 1935–37, as estimated by the Dominion Bureau of Statistics.

The table shows that in 1937 for the whole of Canada there was an estimated decrease of 4,818,656 lb. of maple sugar and a decrease of 790,650 gal. of maple syrup, while the combined value of the two products showed a decrease of \$1,468,739 as compared with the previous year.

27.—Estimated Quantities and Values of Maple Sugar and Maple Syrup Produced in Canada, by Provinces, 1935–37.

Province and Year.	Maple Sugar.			Maple Syrup.			Total Value of Sugar and Syrup.
	Quantity.	Average Price per Pound	Value.	Quantity.	Average Price per Gallon.	Value.	
	lb.	cts.	\$	gal.	\$	\$	\$
Nova Scotia.....1935	94,570	26	24,590	10,664	2.03	21,650	46,240
1936	56,555	21	11,877	5,220	2.44	12,737	24,614
1937	45,240	25	11,310	6,787	2.14	14,254	25,564
New Brunswick..1935	135,170	18	24,330	12,986	1.85	24,020	48,350
1936	131,512	21	27,618	11,203	1.67	18,709	46,327
1937	116,480	19	22,131	5,571	1.74	9,693	31,824
Quebec.....1935	5,747,900	10.4	595,800	1,581,600	1.06	1,671,500	2,267,300
1936	8,506,000	10.9	927,152	1,387,900	1.12	1,554,448	2,481,600
1937	4,020,000	11.0	442,200	780,000	1.11	865,800	1,308,000
Ontario.....1935	561,320	17	95,425	645,519	1.65	1,065,105	1,160,530
1936	537,736	17	91,415	618,396	1.73	1,069,825	1,161,240
1937	231,427	21	48,600	439,711	1.89	831,054	879,654
Canada.....1935	6,538,960	11	740,145	2,250,769	1.24	2,782,275	3,522,420
1936	9,231,803	11	1,058,062	2,022,719	1.31	2,655,719	3,713,781
1937	4,413,147	12	524,241	1,232,069	1.40	1,720,801	2,245,042

Sugar Beets and Beetroot Sugar.—A brief account of the development of the beetroot sugar industry in Canada will be found in the Canada Year Book, 1925, pp. 255–256. At the present time two companies are operating in Canada: the Canada and Dominion Sugar Co., Ltd., with factories at Chatham and Wallaceburg in Ontario, and the Canadian Sugar Factories, Ltd., with plants at Raymond, and Picture Butte, Alberta. Table 28 shows the areas, yields, and values of sugar beets grown in Canada in the years 1927–36.

28.—Acreages, Yields, and Values of Sugar Beets Grown in Canada and Quantities of Refined Beetroot Sugar Produced, 1927–36.

NOTE.—For the years 1911–20, see the 1932 Year Book, p. 1057. For 1921–26, see the 1933 Year Book, p. 257.

Year.	Sugar Beets.					Quantity and Value of Refined Beetroot Sugar Produced.		
	Area Grown.	Yield per Acre.	Total Yield.	Average Price per Ton.	Total Value.			
	acres.	tons.	tons.	\$	\$	lb.	\$	cents per lb.
1927.....	25,961	7.96	206,713	9.73	2,012,134	60,969,131	3,694,303	6.06
1928.....	34,323	7.14	244,930	8.33	2,041,465	64,653,348	3,340,571	5.17
1929.....	32,556	7.23	235,465	8.84	2,080,996	69,399,213	3,335,344	4.81
1930.....	40,532	9.80	397,576	8.25	3,278,625	94,624,700	4,529,944	4.79
1931.....	43,337	10.06	435,992	7.32	3,190,198	107,139,129	4,794,551	4.48
1932.....	44,817	11.28	505,671	6.16	3,113,942	132,016,859	5,789,205	4.39
1933.....	43,807	10.10	442,391	6.31	2,790,929	131,392,501	5,713,181	4.35
1934.....	38,495	10.72	412,672	6.30	2,599,982	114,002,950	4,714,625	4.10
1935.....	51,985	8.33	459,223	6.27	2,881,098	119,857,668	4,617,733	3.90
1936.....	52,748	10.54	555,969	6.31	3,510,922	156,066,242	6,103,264	3.90

The production in 1936-37 of raw beet sugar in the principal beet-growing countries, in thousands of short tons, was as follows: U.S.S.R., 2,203; Germany, 1,992; United States, 1,396; France, 960; Czechoslovakia, 801; United Kingdom, 650; Poland, 505; Italy, 380; Sweden, 330; Belgium, 266; Netherlands, 259; Denmark, 249; Spain, 249; Austria, 161; Hungary, 158; Yugoslavia, 110; Irish Free State, 107.

Tobacco.—In 1936 the commercial tobacco crop of Canada amounted to 46,084,000 lb. from 54,965 acres, as compared with 54,473,000 lb. from 46,870 acres in 1935. The farm value of the tobacco crop for 1936 is estimated at \$9,420,200 as compared with \$10,762,500 for 1935.

Table 29 lists the acreages, quantities produced, and average yields per acre for the years 1927-36. Census figures from 1900 to 1921 and annual figures from 1921 to 1926 were given at p. 284 of the 1934-35 Year Book. For further details, see the March number of the Monthly Bulletin of Agricultural Statistics.

29.—Acreages and Yields of Tobacco in Canada, by Provinces, 1927-36.

Year.	Areas.			Yields.			Average Yields.		
	Quebec.	Ontario.	Canada. ¹	Quebec.	Ontario.	Canada. ¹	Quebec.	Ontario.	Canada. ¹
	acres.	acres.	acres.	'000 lb.	'000 lb.	'000 lb.	lb. per acre.	lb. per acre.	lb. per acre.
1927.....	10,018	33,650	44,028	7,824	35,622	43,917 ²	781 ²	1,059 ²	997
1928.....	10,368	32,654	43,138	8,536 ²	33,266	41,966 ²	823 ²	1,019	973 ²
1929.....	9,300	28,300 ²	37,700 ²	8,380	27,419	29,886	901	757 ²	793 ²
1930.....	8,450	32,805	41,444	8,021	28,617	36,717	949 ²	872 ²	886
1931.....	7,330	47,360	55,060	6,340	44,770	51,300	865	945	932
1932.....	8,520	45,106	54,138	7,952	45,760	54,094	933	1,014	999
1933.....	6,090	40,271	46,898	6,095	38,500	44,904	1,001	955 ²	957
1934.....	8,175	32,329	40,963	7,070	31,400	38,734	865	971 ²	946
1935.....	5,425	41,428	46,870	5,965	48,492	54,473	1,100	1,171	1,162
1936.....	8,678	46,162	54,965	9,111	36,883	46,084	1,050	799	838

¹ The totals for Canada include small amounts produced in other provinces, principally in British Columbia.

² Revised since the publication of the 1937 Year Book.

Flax Fibre.—Table 30, compiled from information furnished by the Economic Fibre Division of the Dominion Experimental Farms, shows the areas, production, and values of flax fibre and allied products in Canada for each of the years 1928 to 1937. Figures for the years 1915 to 1927 will be found at p. 284 of the 1934-35 Year Book.

30.—Acreages, Yields, and Values of Flaxseed, Fibre, and Tow in Canada, 1928-37.

Year.	Area.	Production.			Values.			
		Seed.	Fibre.	Tow.	Seed.	Fibre.	*Tow.	Total.
	acres.	bu.	lb.	tons.	\$	\$	\$	\$
1928.....	6,880	41,280	Nil	6,880	165,120	—	344,000	509,120
1929.....	6,280	32,970	Nil	4,500	156,607	—	236,250	392,857
1930.....	6,143	62,232	Nil	6,086	96,684	—	273,870	370,554
1931.....	4,220	35,870	25,000	3,019	53,805	4,000	120,760	178,565
1932.....	5,135	35,945	200,000	3,552	56,156	18,000	95,964	170,120
1933.....	5,091	30,546	Nil	3,055	65,227	—	96,233	161,460
1934.....	5,965	41,755	45,000	4,361	128,268	7,200	114,450	249,918
1935.....	6,200	37,200	90,000	5,950	142,800	16,200	162,250	321,250
1936.....	6,242	31,210	635,100	3,094	106,185	114,318	77,350	297,853
1937.....	7,907	39,535	1,368,600	2,654	40,220	211,880	79,620	331,720

Apiculture.—The data on beekeeping in Canada for the years 1935 and 1936, as given in the following table, have been furnished by the provincial Departments of Agriculture and compiled in consultation with the Dominion Apiarist. The estimates for Ontario have been compiled on a new basis and are not strictly comparable with estimates published for the years prior to 1933. Values are as quoted

by the provincial Departments and represent for the most part average wholesale prices; for British Columbia, the values, as in previous years, have been calculated on what is considered a fair average of the wholesale and retail prices.

Statistics of beeswax, where not furnished by the provinces, have been estimated at 1.5 p.c. of the honey crop and valued at the average price of 25 cents per lb. in 1936 and 27 cents per lb. in 1935.

Table 31 shows for Canada, by provinces, the numbers of beekeepers, numbers of hives, average production per colony, and the production and values of honey and wax for the years 1935 and 1936. Production in 1936 showed an increase of 16 p.c. in volume and 17 p.c. in value.

Figures of honey production, as at the Censuses of 1921 and 1931, were given at p. 285 of the 1934-35 edition of the Year Book.

31.—Production and Values of Honey and Beeswax in Canada, by Provinces, 1935 and 1936.

Province and Year.	Bee-keepers.	Hives.	Honey.				Beeswax.		Total Value, Honey and Wax.
			Average Yield per Hive.	Total Production.	Average Price per lb.	Total Value.	Production.	Value.	
	No.	No.	lb.	lb.	cts.	\$	lb.	\$	\$
Prince Edward Island.....	1935	1	1	9,500	10.0	950	140	40	990
	1936	1	1	14,000	11.0	1,500	210	60	1,560
Nova Scotia.....	1935	250	1,160	56,600	15.9	9,000	1,300	400	9,400
	1936	250	1,200	60,000	15.0	9,000	1,000	300	9,300
New Brunswick.....	1935	1	1	50,000	13.9	6,950	750	200	7,150
	1936	1	1	50,000	13.0	6,500	750	200	6,700
Quebec.....	1935	5,800	60,000	67.0	4,013,600	9.5	380,800	12,600	393,400
	1936	6,800	71,500	75.3	5,395,500	8.9	482,900	18,000	500,900
Ontario.....	1935	8,200	195,000	60.0	11,700,000	7.4	864,500	42,500	907,000
	1936	8,200	195,000	46.0	8,970,000	8.0	717,600	30,850	748,450
Manitoba.....	1935	3,300	51,400	97.0	5,018,700	7.1	354,600	12,400	367,000
	1936	3,440	51,300	158.6	8,135,500	7.0	569,000	16,400	585,400
Saskatchewan.....	1935	2,680	14,100	74.7	1,051,400	11.2	117,700	4,300	122,000
	1936	2,990	17,100	155.1	2,636,300	10.0	263,100	9,100	272,200
Alberta.....	1935	1,000	13,500	84.2	1,100,000	9.0	99,000	3,700	102,700
	1936	1,150	12,200	152.0	1,850,000	9.0	166,500	6,400	172,900
British Columbia.....	1935	3,130	22,750	56.9	1,291,200	15.0	193,700	3,300	197,000
	1936	3,080	21,000	53.7	1,129,700	15.0	169,500	2,800	172,300
Totals.....	1935	1	1	24,291,000	8.3	2,027,200	293,040	79,440	2,106,640
	1936	1	1	28,241,000	8.4	2,385,600	342,110	84,110	2,469,710

¹ Information not available for Prince Edward Island and New Brunswick.

Subsection 7.—Farm Labour and Wages.

Average Wages of Farm Help.—The cost of farm labour reached its highest point in 1920. In the next two years there was a rapid drop, while from 1923 until 1929 there was little change. The years 1930 to 1933 showed continuous marked reductions in average values of yearly wages and board, following the downward trend of the prices of farm produce. From 1934 to 1937 slight increases were registered.

In Table 32 the values of wages and board are given for the years 1914, 1920, 1930, and 1935-37, both for the summer season and for the year, distinction being made in all cases between wages and board.

32.—Average Wages and Board of Farm Help in Canada, as Estimated by Crop Correspondents, 1914, 1920, 1930, and 1935-37.

NOTE.—M=Males. F=Females.

Province.	Year.	Per Month in Summer Season.						Per Year.					
		Wages.		Board.		Wages and Board.		Wages.		Board.		Wages and Board.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Canada.....	1914	22	8	14	11	36	19	155	57	168	132	323	189
	1920	60	27	26	20	86	47	543	275	278	217	821	492
	1930	34	20	22	18	56	38	326	210	233	199	559	409
	1935	20	11	15	12	35	23	184	117	174	137	353	254
	1936	21	11	16	13	37	24	206	126	168	135	374	261
	1937	23	12	17	13	40	25	224	134	176	138	400	272
P. E. Island.....	1914	15	5	10	8	25	13	101	40	120	96	221	136
	1920	42	18	18	14	60	32	371	212	201	160	572	372
	1930	32	16	18	14	50	30	308	179	205	165	513	344
	1935	18	11	13	11	31	22	188	122	155	125	343	247
	1936	18	11	13	11	31	22	190	126	161	136	351	262
	1937	21	11	15	13	36	24	206	125	168	127	374	252
Nova Scotia.....	1914	20	7	11	8	31	15	169	59	132	96	301	155
	1920	49	21	24	17	73	38	472	218	233	190	735	408
	1930	34	17	20	14	54	31	353	187	209	157	562	344
	1935	22	13	15	11	37	24	213	128	151	117	364	245
	1936	22	12	15	11	37	23	245	136	170	124	415	260
	1937	25	12	15	11	40	23	262	145	173	127	435	272
New Brunswick..	1914	21	7	11	8	32	15	170	69	132	96	302	165
	1920	56	19	23	16	79	35	531	213	254	178	785	391
	1930	34	16	20	15	54	31	335	181	215	164	550	345
	1935	21	10	14	11	35	21	210	103	150	113	360	216
	1936	25	11	15	11	40	22	257	117	141	101	398	218
	1937	28	12	16	12	44	24	295	133	147	115	442	248
Quebec.....	1914	21	7	13	9	34	16	140	44	156	108	296	152
	1920	62	24	24	16	86	40	524	235	243	172	767	407
	1930	33	17	19	13	52	30	316	175	194	139	510	314
	1935	18	10	13	10	31	20	170	98	136	98	306	196
	1936	19	10	13	10	32	20	196	106	136	100	332	206
	1937	25	12	15	11	40	23	226	121	150	111	376	232
Ontario.....	1914	19	7	13	10	32	17	141	52	156	120	297	172
	1920	52	25	23	19	75	44	474	259	262	211	736	470
	1930	31	21	20	17	51	38	304	229	228	194	532	423
	1935	20	12	16	14	36	26	187	137	185	150	372	287
	1936	21	13	16	14	37	27	211	147	177	148	388	295
	1937	25	14	18	15	43	29	235	158	186	154	421	312
Manitoba.....	1914	24	9	15	13	39	22	184	70	180	156	364	226
	1920	70	34	28	24	98	58	650	312	325	247	975	559
	1930	32	18	21	18	53	36	298	194	238	204	536	398
	1935	17	9	15	12	32	21	160	92	163	140	323	232
	1936	19	9	15	13	34	22	178	103	158	132	336	235
	1937	21	10	16	13	37	23	202	113	165	136	367	249
Saskatchewan....	1914	24	9	17	14	41	23	162	67	204	168	366	235
	1920	72	35	30	25	102	60	667	364	336	289	1,003	653
	1930	37	21	23	19	60	40	340	215	253	212	593	427
	1935	18	9	15	13	33	22	173	96	172	144	345	240
	1936	19	9	16	13	35	22	188	105	158	133	346	238
	1937	19	10	16	13	35	23	184	106	160	127	344	233
Alberta.....	1914	24	10	16	14	40	24	173	68	192	168	365	236
	1920	76	36	31	26	107	62	697	360	341	278	1,038	638
	1930	37	21	23	20	60	41	342	223	256	222	598	445
	1935	21	11	16	14	37	25	189	115	178	156	367	271
	1936	22	11	16	14	38	25	206	125	172	146	378	271
	1937	23	12	17	15	40	27	221	131	180	151	401	282

32.—Average Wages and Board of Farm Help in Canada, as Estimated by Crop Correspondents, 1914, 1920, 1930, and 1935-37—concluded.

NOTE.—M=Males. F=Females.

Province.	Year.	Per Month in Summer Season.						Per Year.					
		Wages.		Board.		Wages and Board.		Wages.		Board.		Wages and Board.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
British Columbia.....	1914	27	13	21	18	48	31	208	108	252	216	460	324
	1920	64	36	31	27	95	63	684	431	349	311	1,033	742
	1930	46	25	26	21	72	46	450	270	291	242	741	512
	1935	26	14	19	16	45	30	242	160	223	187	465	347
	1936	25	15	21	17	46	32	265	166	229	192	494	358
	1937	28	17	21	18	49	35	279	170	234	193	513	363

Subsection 8.—Prices of Agricultural Produce.

The average monthly cash prices of representative grades of Canadian wheat, oats, barley, flaxseed, and rye in the Winnipeg market—basis, in store at Fort William and Port Arthur—will be found for each month from August, 1935, to December, 1937, in Table 33. The average monthly prices of flour, bran, and shorts at Montreal, Toronto, Winnipeg, Minneapolis, and Duluth for 1937 are given in Table 34.

The yearly average prices per cwt. of Canadian live stock at Toronto, Montreal, Winnipeg, and Edmonton are given for 1936 in Table 35 and the average monthly prices in 1937 at these centres and at Calgary in Table 36.

33.—Monthly Average Cash Prices per Bushel at Winnipeg of Representative Grades of Canadian Wheat, Oats, Barley, Flaxseed, and Rye—basis in store at Fort William and Port Arthur—Aug., 1935–Dec., 1937, and Yearly Average Prices for crop years ended July 31, 1926–37.

Year and Month.	Wheat, No. 1 N.	Oats, No. 2 C.W.	Barley, No. 3 C.W.	Flaxseed, No. 1 C.W.	Rye, No. 2 C.W.
	cts.	cts.	cts.	cts.	cts.
Averages, crop year ended July, 1926...	151.2	49.6	63.9	213.8	89.8
Averages, crop year ended July, 1927...	146.2	58.8	72.7	195.0	99.7
Averages, crop year ended July, 1928...	146.3	65.2	85.3	189.9	129.9
Averages, crop year ended July, 1929...	124.0	58.8	71.4	202.2	100.7
Averages, crop year ended July, 1930...	124.2	58.6	60.0	247.5	80.2
Averages, crop year ended July, 1931...	64.2	29.9	28.4	114.1	34.7
Averages, crop year ended July, 1932...	59.8	31.4	37.3	93.7	40.0
Averages, crop year ended July, 1933...	54.3	26.4	32.3	90.6	37.8
Averages, crop year ended July, 1934...	65.1	33.9	38.8	148.0	47.5
Averages, crop year ended July, 1935...	81.9	42.8	48.2	138.6	52.9
1935.					
August.....	84.5	36.4	33.9	123.8	36.5
September.....	90.3	36.0	35.8	136.4	40.5
October.....	90.8	34.0	33.9	141.1	42.3
November.....	85.8	31.9	33.3	141.1	41.1
December.....	84.6	29.8	33.9	145.8	41.6
1936.					
January.....	84.8	33.6	35.3	159.6	42.5
February.....	82.1	35.5	36.1	159.0	42.9
March.....	82.1	35.9	37.8	157.3	43.4
April.....	80.5	33.6	37.9	150.0	41.4
May.....	76.8	33.0	37.3	145.4	41.1
June.....	79.5	33.4	38.0	146.3	44.0
July.....	93.5	41.4	51.0	165.4	55.3
Averages, crop year ended July, 1936...	84.6	34.5	37.0	147.6	42.7
August.....	102.3	49.5	59.9	177.4	67.1
September.....	103.9	44.9	58.9	167.6	68.0
October.....	110.9	44.4	61.0	163.6	69.8
November.....	108.5	45.3	61.9	159.3	78.4
December.....	120.3	50.0	76.4	167.6	96.6

33.—Monthly Average Cash Prices per Bushel at Winnipeg of Representative Grades of Canadian Wheat, Oats, Barley, Flaxseed, and Rye—basis in store at Fort William and Port Arthur—Aug., 1935–Dec., 1937, and Yearly Average Prices for crop years ended July 31, 1926–37—concluded.

Year and Month.	Wheat, No. 1 N.	Oats, No. 2 C.W.	Barley, No. 3 C.W.	Flaxseed, No. 1 C.W.	Rye, No. 2 C.W.
	cts.	cts.	cts.	cts.	cts.
1937.					
January.....	124.7	54.5	83.8	169.5	103.1
February.....	127.0	55.0	83.3	170.0	104.8
March.....	135.6	56.4	81.4	178.9	107.0
April.....	138.9	58.8	74.8	182.3	113.5
May.....	130.6	56.3	71.1	172.6	114.4
June.....	124.1	57.1	66.0	165.6	116.1
July.....	145.6	63.6	71.9	180.0	147.3
Averages, crop year ended July, 1937...	122.7	53.0	70.9	171.2	98.8
August.....	131.8	50.9	58.3	173.3	87.5
September.....	133.6	52.0	59.3	175.9	89.5
October.....	142.3	53.4	62.1	178.0	84.5
November.....	134.6	47.5	58.6	174.0	73.8
December.....	137.4	49.5	57.3	170.1	75.3

34.—Monthly Average Prices of Flour, Bran, and Shorts at Principal Markets, 1937.

SOURCES: For Montreal, the *Gazette*; for Toronto, dealers' quotations; for Winnipeg and U.S. cities, the *No. 12 Western Miller*, Minneapolis.

NOTE.—The ton=2,000 lb. and the barrel=196 lb.

Month.	Montreal.				Toronto.			
	Flour, First Patents. ¹	Flour, Ontario, Delivered at Montreal.	Bran.	Shorts.	Flour, First Patents (Jute Bags).	Flour, First Patents (Cotton Bags).	Bran.	Shorts.
	per bbl. \$	per bbl. \$	per ton. \$	per ton. \$	per bbl. \$	per bbl. \$	per ton. \$	per ton. \$
January.....	7.46	5.58	33.93	35.01	7.46	7.60	33.50	34.75
February.....	7.50	5.74	32.58	33.58	7.50	7.70	32.40	33.40
March.....	7.85	5.82	32.75	33.75	7.85	8.00	32.50	33.75
April.....	7.91	5.99	36.63	37.64	7.91	7.60	36.75	37.75
May.....	7.58	5.82	35.25	36.25	7.58	7.50	35.00	36.00
June.....	7.36	5.61	23.29	32.75	7.36	7.40	29.00	32.75
July.....	8.38	6.09	28.37	33.37	8.38	8.90	27.25	32.25
August.....	7.86	5.26	25.10	27.33	7.86	8.20	25.40	28.00
September.....	7.83	5.18	24.56	26.56	7.83	7.70	24.25	26.25
October.....	7.99	5.12	25.48	27.48	7.99	7.90	25.20	27.20
November.....	7.69	4.96	27.25	29.25	7.69	7.60	28.00	30.00
December.....	7.95	4.71	28.25	30.25	7.95	7.90	28.00	30.00

Month.	Winnipeg.			Minneapolis.			Duluth.
	Flour.	Bran.	Shorts.	Flour.	Bran.	Shorts.	Flour.
	per bbl. \$	per ton. \$	per ton. \$	per bbl. \$	per ton. \$	per ton. \$	per bbl. \$
January.....	7.18	30.00	32.00	7.85-8.10	34.00-34.37	34.00-34.50	7.95-8.10
February.....	7.10	29.50	31.00	7.71-8.08	30.80-31.90	32.20-32.90	7.84-8.04
March.....	7.48	29.75	30.75	7.71-8.10	34.00-34.25	35.75-36.38	7.93-8.08
April.....	7.68	32.00	33.00	7.55-8.02	36.38-36.75	37.63-38.12	7.83-7.98
May.....	7.30	32.00	33.00	7.30-7.75	32.00-32.60	36.70-37.30	7.37-7.52
June.....	7.25	29.50	30.50	7.15-7.44	22.75-23.75	30.25-31.50	7.36-7.51
July.....	8.37	27.00	30.25	7.66-7.90	25.75-26.25	32.00-32.25	8.27-8.43
August.....	7.80	24.00	26.40	6.81-7.11	18.25-18.80	19.35-20.30	7.12-7.27
September.....	7.60	22.75	24.75	6.26-6.53	18.19-18.62	20.00-20.25	6.66-6.81
October.....	7.80	23.00	25.00	6.02-6.24	19.10-19.30	20.10-20.40	6.52-6.67
November.....	7.67	23.00	25.00	5.60-5.84	19.00-19.75	19.00-19.63	6.15-6.30
December.....	7.60	23.00	25.00	5.81-5.98	18.87-19.37	18.87-19.37	6.19-6.34

¹ Carload lots—Montreal rate points, which includes the Toronto district also.

35.—Yearly Average Prices per Cwt. of Canadian Live Stock at Principal Markets, 1936.

Source: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Item.	Toronto.	Montreal.	Winnipeg.	Edmonton.
	\$	\$	\$	\$
Steers, up to 1,050 lb., good.....	5.04	5.64	4.49	4.10
Steers, up to 1,050 lb., medium.....	4.59	4.80	3.67	3.52
Steers, up to 1,050 lb., common.....	3.75	3.85	2.69	2.62
Steers, over 1,050 lb., good.....	5.41	5.67	4.54	4.14
Steers, over 1,050 lb., medium.....	5.05	4.81	3.71	3.63
Steers, over 1,050 lb., common.....	4.53	3.89	2.81	2.54
Heifers, good.....	5.01	4.66	3.77	3.39
Heifers, medium.....	4.59	3.78	2.98	2.81
Calves, fed, good.....	6.26	6.23	5.28	4.26
Calves, fed, medium.....	5.63	5.12	4.05	3.50
Calves, veal, good and choice.....	8.30	7.38	5.68	4.27
Calves, veal, common and medium.....	6.53	5.78	3.76	3.05
Cows, good.....	3.54	3.61	2.85	2.34
Cows, medium.....	3.07	3.21	2.27	1.78
Bulls, good.....	3.52	3.87	2.48	2.12
Stocker and feeder steers, good.....	3.95	2	3.27	2.89
Stocker and feeder steers, common.....	3.38	2	2.00	2.01
Stock cows and heifers, good.....	3.00	2	2.36	1.99
Stock cows and heifers, common.....	1.68	2	1.60	1.44
Hogs, select bacon.....	8.94	9.30	8.38	8.16
Hogs, bacon.....	8.43	8.81	7.87	7.65
Hogs, butchers.....	1	8.36	7.37	7.22
Hogs, heavies.....	1	8.46	7.65	6.77
Hogs, lights and feeders.....	1	8.40	7.34	6.93
Lambs, good handy weights.....	8.77	7.80	6.86	6.23
Lambs, common, all weights.....	6.56	6.28	4.86	4.26
Sheep, good handy weights.....	3.98	4.02	2.42	3.35

¹ Bacon price less \$1 per head.² No sales reported.**36.—Monthly Average Prices per Cwt. of Canadian Live Stock at Principal Markets, 1937.**

Market and Item.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Montreal—												
Steers, up to 1,050 lb., good.....	6.34	6.86	7.13	8.02	8.01	8.59	8.40	8.31	8.09	7.91	7.06	6.90
Heifers, good.....	5.14	5.30	5.73	6.37	6.62	7.08	6.71	6.49	5.64	5.07	5.24	5.35
Calves, veal, good and choice.....	9.98	9.62	7.97	6.97	7.10	7.58	7.58	8.61	8.92	9.19	9.48	9.81
Hogs, bacon.....	8.68	8.57	8.88	9.23	9.14	9.52	10.19	10.46	10.26	9.11	8.30	8.67
Hogs, butchers.....	8.19	8.07	8.38	8.74	8.63	9.05	9.71	9.97	9.75	8.62	7.80	8.17
Lambs, good handy weights.....	8.67	9.21	9.32	1	1	10.61	8.91	8.57	8.51	7.96	7.69	8.00
Sheep, good handy weights.....	4.03	4.69	5.24	5.17	4.78	3.99	3.40	3.76	3.75	3.61	3.67	3.92
Toronto—												
Steers, up to 1,050 lb., good.....	5.74	5.73	6.32	7.13	7.34	7.95	7.50	7.56	7.12	6.19	5.74	5.67
Heifers, good.....	5.63	5.61	6.20	7.11	7.28	7.87	7.32	7.37	7.08	6.13	5.97	5.71
Calves, veal, good and choice.....	10.93	9.41	9.24	9.19	8.37	7.78	8.17	9.28	9.52	9.61	9.63	9.71
Hogs, bacon.....	8.53	8.28	8.51	8.75	8.85	9.25	10.24	10.62	10.52	8.74	8.20	8.32
Hogs, butchers.....	2	2	2	2	2	2	2	2	2	2	7.65	7.77
Lambs, good handy weights.....	9.81	9.64	10.08	10.88	3	11.71	10.90	9.45	8.62	7.84	7.82	7.68
Sheep, good handy weights.....	5.32	5.11	5.21	5.61	4.43	3.30	3.56	3.83	4.04	3.94	4.19	4.24
Winnipeg—												
Steers, up to 1,050 lb., good.....	5.32	5.44	6.22	6.66	6.99	7.50	7.24	7.02	6.71	5.65	5.40	5.23
Heifers, good.....	4.40	4.48	5.17	5.63	6.05	6.38	5.56	5.31	4.86	4.28	4.30	4.34
Calves, veal, good and choice.....	7.69	7.20	6.53	6.33	6.49	5.73	5.11	5.83	6.12	6.42	6.81	7.98
Hogs, bacon.....	7.71	7.74	8.10	8.41	8.05	8.60	9.37	9.97	9.32	7.98	7.78	8.03
Hogs, butchers.....	7.21	7.24	7.60	7.91	7.55	8.10	8.91	9.49	8.81	7.48	7.28	7.53
Lambs, good handy weights.....	8.06	8.43	8.62	7.96	9.97	8.67	8.15	7.78	7.07	6.22	6.72	6.82
Sheep, good handy weights.....	2.51	2.90	3.03	3.29	3.98	3.93	2.83	2.81	2.72	2.67	2.75	2.74

¹ Spring lambs, per head: April, \$6.75-\$7.20; May \$4.40-\$7.25.² Bacon price less \$1 per head.³ Spring lambs per head: \$5-\$11.

36.—Monthly Average Prices per Cwt. of Canadian Live Stock at Principal Markets, 1937—concluded.

Market and Item.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Calgary—												
Steers, up to 1,050 lb., good.....	5.38	5.52	5.87	7.55	8.07	7.89	7.22	6.93	6.21	5.14	4.78	4.75
Heifers, good.....	4.39	4.75	5.33	6.68	7.02	7.15	5.64	5.48	4.85	4.47	4.08	4.00
Calves, veal, good and choice.....	5.68	6.50	7.25	7.11	7.78	5.61	4.90	5.25	5.30	5.25	4.70	4.50
Hogs, bacon.....	7.60	7.50	7.66	7.95	7.72	8.15	8.96	9.71	9.18	8.12	7.66	7.79
Hogs, butchers.....	7.09	6.99	7.17	7.45	7.22	7.65	8.46	9.21	8.66	7.68	7.16	7.29
Lambs, good handy weights.....	7.22	7.75	7.75	8.23	8.97	9.18	7.42	6.49	6.28	6.33	5.81	6.00
Sheep, good handy weights.....	3.50	1	3.02	3.50	4.00	5.27	4.06	3.42	2.81	2.75	2.75	2.75
Edmonton—												
Steers, up to 1,050 lb., good.....	5.33	5.39	6.28	7.52	7.75	7.66	5.91	5.38	5.66	5.12	5.12	5.25
Heifers, good.....	4.25	4.37	5.25	6.04	6.63	6.72	5.01	4.57	4.60	3.72	3.90	4.45
Calves, veal, good and choice.....	6.25	6.50	7.00	6.63	7.27	5.42	5.25	5.35	5.75	5.72	5.50	5.74
Hogs, bacon.....	7.37	7.46	7.78	8.02	7.73	8.27	9.10	9.59	9.78	7.88	7.69	7.81
Hogs, butchers.....	6.86	6.95	7.31	7.52	7.24	7.77	8.62	9.08	8.68	7.49	7.20	7.29
Lambs, good handy weights.....	7.27	7.73	8.10	8.53	8.75	7.75	7.25	6.35	5.86	6.00	5.90	6.00
Sheep, good handy weights.....	3.59	4.00	4.33	4.50	4.50	3.47	3.00	2.89	2.81	3.16	3.50	3.50

¹ No sales reported.

Index Numbers of Agricultural Prices.—Records of the average prices received by farmers for their crops have been collected annually since 1909 through the crop correspondents of the Census and Statistics Office or the Dominion Bureau of Statistics. From these records, annual index numbers of prices have been calculated for each crop and for the field crops as a whole. The results of these calculations using the year 1926 as the base period, are presented in Table 37. In addition to the price indexes shown here, index numbers have been calculated of the yields of the various crops from year to year, and, by a combination of the prices and yields, index numbers of the value of all field crops, weighted according to quantities, have been obtained. Indexes of yield and value are not shown here, owing to lack of space, but appear at pp. 30-32 of the Monthly Bulletin of Agricultural Statistics, January, 1938.

37.—Index Numbers of Producers' Prices of Agricultural Commodities, for Canada, 1915-37.

NOTE.—Average prices, 1926=100. For the formulæ used in the calculation, see Monthly Bulletin of Agricultural Statistics, January, 1937, p. 28.

Field Crop.	Average Price 1926. ¹	Index Numbers.										
		1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.
Wheat.....	\$ 1.09	83.5	120.2	178.0	185.3	217.4	148.6	74.3	78.0	61.5	111.9	112.8
Oats.....	0.48	75.0	106.3	143.8	162.5	166.7	110.4	70.8	79.2	68.8	102.1	87.5
Barley.....	0.52	100.0	158.8	207.7	192.3	236.5	159.6	90.4	88.5	80.8	134.6	101.9
Rye.....	0.77	100.0	142.9	210.4	193.5	181.1	172.7	93.5	75.3	63.6	128.6	100.0
Peas.....	1.75	94.3	126.9	202.3	170.9	163.4	138.3	112.0	105.1	98.3	100.0	94.3
Beans.....	2.64	115.5	204.5	282.2	204.9	169.7	147.0	109.8	108.0	100.8	104.9	97.7
Buckwheat.....	0.87	86.2	123.0	167.8	181.6	172.4	147.1	102.3	96.6	96.6	102.3	97.7
Mixed grains.....	0.66	86.4	133.3	175.8	172.7	206.1	136.4	93.8	90.9	89.4	107.6	93.5
Flaxseed.....	1.62	93.2	125.9	163.6	193.2	254.9	119.8	88.9	106.2	109.3	119.8	114.2
Corn for husking.....	1.00	71.0	107.0	184.0	175.0	134.0	116.0	83.0	83.0	92.0	119.0	94.0
Potatoes.....	1.47	68.0	91.8	115.0	110.9	107.5	110.2	87.1	61.2	69.4	57.8	140.1
Turnips, etc.....	0.60	80.0	130.0	153.3	141.7	163.3	138.3	111.7	90.0	98.3	73.3	93.3
Hay and clover.....	12.13	118.4	95.6	85.2	134.0	170.8	215.2	194.2	111.0	90.4	91.3	85.3
Grain hay.....	10.11	2	2	2	2	286.8	327.6	2	127.3	34.3	91.5	91.5
Alfalfa.....	13.30	95.3	80.4	87.1	134.1	164.3	178.8	150.0	96.0	87.1	88.0	95.6
Fodder corn.....	4.88	100.6	100.8	105.3	126.0	141.8	158.8	144.5	101.8	94.7	104.9	82.6
Sugar beets.....	6.45	85.3	96.1	104.7	158.9	168.4	198.4	100.8	122.2	100.5	105.3	94.3
All Field Crops.....	-	83.7	106.7	138.7	158.5	178.7	149.3	101.1	86.6	72.4	102.3	102.1

¹ Prices quoted are per bushel, except for potatoes and turnips, etc., which are per cwt., and the last five items, which are per ton. For details of index numbers by provinces, see Monthly Bulletin of Agricultural Statistics, January, 1938, pp. 30-37.

² Not available.

37.—Index Numbers of Producers' Prices of Agricultural Commodities, for Canada, 1915-37—concluded.

Field Crop.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936. ¹	1937. ²
Wheat.....	100.0	91.7	73.4	96.3	44.9	34.9	32.1	44.9	56.0	56.0	86.2	91.7
Oats.....	100.0	106.3	97.9	122.9	50.0	50.0	39.6	54.2	66.7	50.0	89.6	89.6
Barley.....	100.0	126.9	107.7	113.5	38.5	50.0	44.2	57.7	90.4	55.8	132.7	98.1
Rye.....	100.0	106.5	102.6	109.1	26.0	36.4	35.1	49.3	63.6	35.1	90.9	94.8
Peas.....	100.0	100.6	105.7	117.7	84.0	48.0	48.6	57.1	60.0	62.3	92.6	96.0
Beans.....	100.0	87.9	135.2	125.0	86.0	26.1	20.8	37.5	50.4	55.3	77.3	46.6
Buckwheat.....	100.0	102.3	106.9	108.0	74.7	57.5	49.4	57.5	60.9	58.6	81.6	81.6
Mixed grains.....	100.0	109.0	107.8	115.2	63.6	56.1	50.0	60.6	62.1	54.5	84.8	77.3
Flaxseed.....	100.0	95.7	98.1	146.9	58.0	48.8	38.3	74.1	71.0	73.5	88.9	93.2
Corn for husking.....	100.0	99.0	112.0	106.0	87.0	42.0	45.0	59.0	65.0	45.0	70.0	61.0
Potatoes.....	100.0	79.6	54.4	108.2	56.5	29.2	42.9	52.4	34.0	54.4	77.6	43.5
Turnips, etc.....	100.0	76.7	78.3	88.3	73.3	46.7	45.0	56.7	51.7	53.3	58.3	55.0
Hay and clover.....	100.0	85.8	85.5	96.0	81.0	62.8	58.5	72.3	96.9	62.8	63.1	61.6
Grain hay.....	100.0	100.0	99.7	95.0	66.6	60.6	58.8	67.9	70.4	60.5	63.4	61.6
Alfalfa.....	100.0	90.5	86.5	94.1	91.1	78.0	64.5	69.5	95.3	51.8	69.1	60.5
Fodder corn.....	100.0	91.6	96.1	106.2	101.0	81.4	56.4	67.2	84.4	68.0	69.3	63.1
Sugar beets.....	100.0	120.8	112.4	119.2	106.5	94.9	96.6	93.6	87.4	84.3	80.0	92.9
All Field Crops.	100.0	96.5	84.6	104.9	57.8	46.9	43.1	55.7	67.4	55.9	89.9	76.5

¹ Most of the figures for 1936 have been revised since the publication of the 1937 Year Book.

² Subject to revision.

The general index number fell from 1924 to 1928, especially from 1926 to 1928, recovered strongly in 1929 but declined rapidly to reach the record low of 43.1 for the 1932 crops. All the crops contributed to this sharp decline, although the grain crops dependent upon overseas markets suffered the most. The forage crops and sugar beets, which are used within the country, held up well in price, partly owing to the fact that climatic conditions did not favour high yields in these years.

During the next two years there was considerable improvement in the prices of these field crops. Fodder and hay prices rose materially because of short crops and good demand. The general index rose from 43.1 in 1932 to 67.4 in 1934. The decline to 55.9 in 1935 was mainly due to increased production and consequent lower prices of coarse grains and forage crops, while sharply increased prices, especially for the grain crops, brought the index up to 80.9 for 1936, the highest point since 1929.

Subsection 9.—Agricultural Statistics of the Census.

A summary of the more important agricultural statistics compiled from the Census of 1931 was published at pp. 295-301 of the 1934-35 edition of the Year Book. The review included statistics of tenure of farms; farm values; mortgage indebtedness; farm expenditures; farm population; farm workers; and cost of labour, farm machinery, and facilities. In the 1937 edition of the Year Book, further statistics were presented at pp. 270-273 which showed for the Prairie Provinces, comparative figures of population, farm holdings, areas, and values, the condition of farm land, the numbers of live stock, and the acreages of the principal crops, for each of the census years 1936, 1931, 1926, 1921, and 1911.

Subsection 10.—Miscellaneous Agricultural Statistics.

Agricultural Irrigation.—*Alberta.**—The surface waters in Alberta are vested in the Crown and are administered by the Water Resources Office under the Water Resources Act. All matters affecting the control of water supply generally, as well as the inspection and authorization of works for the use of water for domestic, municipal, industrial, irrigation, and other purposes, and the granting of licences

* Revised by L. C. Charlesworth, Director of Water Resources, Edmonton, Alberta.

for such purposes are dealt with thereunder. The Director of Water Resources at Edmonton is responsible for all field administration. The Irrigation Districts Act of Alberta (R.S.A., 1922, c. 114) and amending statutes provide for the formation of irrigation districts, and authorize the raising of loans under by-laws adopted by the voters of the district. Table 38 gives statistics of the larger irrigation projects in Alberta for the years 1935 and 1936.

38.—Major Irrigation Projects in Southern Alberta, 1935 and 1936.

Project.	Source of Supply.	1935.			1936.		
		Irrigable Area.	Length of Canals.	Area Irrigated in 1935.	Irrigable Area.	Length of Canals.	Area Irrigated in 1936.
		acres.	miles.	acres.	acres.	miles.	acres.
C.P.R. Western.....	Bow river.....	218,980	1,566	19,109	218,980	1,347	44,614
C.P.R. Lethbridge.....	St. Mary river.....	100,000	196	70,000	100,000	196	75,274
Canada Land.....	Bow river.....	130,000	453	22,694	130,000	453	24,453
Taber.....	St. Mary river.....	21,499	96	19,471	21,499	99	19,123
Lethbridge Northern.....	Oldman river.....	96,871	600	73,022	96,777	600	62,790
United.....	Belly river.....	34,166	175	12,000	34,166	175	18,000
New West.....	Bow river.....	4,563	24	2,066	4,563	24	2,207
Magrath.....	St. Mary river.....	6,975	90	4,000	6,975	90	4,000
Raymond.....	St. Mary river.....	15,130	16	13,000	15,130	16	13,000
Mountain View.....	Belly river.....	3,500	22	3,000	3,500	22	2,900
Little Bow.....	Highwood river.....	3,093	2.5	300	3,093	2.5	200
Eastern.....	Bow river.....	250,000	1,904	143,997	250,000	1,904	111,781

The Canadian Pacific Railway Co. has constructed three large projects known as the Eastern, Western, and Lethbridge sections, the last-named being the oldest irrigation project in Alberta. In 1935 the interests of the Company in the Eastern project were transferred to the water contract holders, who are now operating under the name of the Eastern Irrigation District. By agreement with the Canadian Pacific Railway Co., the Taber, Magrath, and Raymond irrigation districts procure their water supply from the main canal of the Lethbridge section, a further 43,603 acres being served by the canals of these districts.

The total irrigable area served by the Canada Land and Irrigation Co.'s project is 130,000 acres, while the New West Irrigation District, by agreement with the Canada Land and Irrigation Co., receives a water supply for a further irrigable area of 4,563 acres.

In addition to the irrigated tracts enumerated in the foregoing table, there are approximately 360 privately-owned projects in Alberta, with a possible irrigable area of 56,724 acres.

*British Columbia.**—The surface waters of British Columbia are vested in the Crown in the right of the province and are administered by the Water Rights Branch of the Department of Lands under the Water Act, the Drainage Dyking and Development Act and the Ditches and Watercourses Act. The administration of the Acts is vested in the Comptroller of Water Rights and the Water Board, the latter comprising a Chairman, the Comptroller of Water Rights and the Chief Engineer of the Branch.

Licences to use water for irrigation are issued by the Comptroller of Water Rights, and since 1858, when the first right to use water was given, upwards of 9,000 irrigation licences have been issued.

* Revised by J. C. MacDonald, Comptroller of Water Rights, Department of Lands, Victoria, British Columbia.

There are several forms of organization operating irrigation systems in British Columbia, and Table 39 gives statistics of the larger irrigation projects for the year 1937.

39.—Major Irrigation Projects in British Columbia, 1937.

Project.	Source of Supply.	Irrigable Area.	Irrigated Area.	Locality.
		acres.	acres.	
PROVINCIAL.				
South Okanagan.....	Okanagan river.....	6,000	3,520	Oliver, Okanagan valley.
MUNICIPAL.				
Penticton municipality....	Penticton and Ellis creeks	2,576	2,464	Okanagan valley.
Summerland municipality..	Trout and Eneas creeks..	5,000	3,309.6	Okanagan valley.
IRRIGATION DISTRICTS (Co-OPERATIVE).				
Black Mountain.....	Belgo creek.....	4,607	3,685.46	Okanagan valley.
Cawston.....	Similkameen river.....	900	203.83	Similkameen valley.
East Creston.....	Arrow creek.....	1,700	1,113.6	South end, Kootenay lake.
Girouard.....	Swan Lake creek.....	134	110	Okanagan valley.
Glenmore.....	Kelowna creek.....	2,524	1,836	Okanagan valley.
Grand Forks.....	Kettle river.....	2,733	2,090.5	Kettle valley.
Heffley Creek.....	Heffley creek and N. Thompson river.....	2,700	1,390	N. Thompson valley.
Kaleden.....	Marron creek.....	543	376	Okanagan valley.
Keremeos.....	Ashnola river and Kere- meos creek.....	1,000	762	Similkameen valley.
Malcolm Horie.....	Joseph creek.....	300	158.8	Near Cranbrook.
Marble Canyon.....	Pavilion creek.....	1,350	929.2	Pavilion.
Naramata.....	Lequime and Robinson creeks.....	1,061	837.09	Okanagan valley.
Okanagan Falls.....	Shuttleworth creek.....	194	194	Okanagan valley.
Oyama.....	Oyama creek.....	391	353.83	Okanagan valley.
Peachland.....	Peachland creek.....	738	331.4	Okanagan valley.
Robson.....	Pass creek.....	261	250	Lower Arrow lake.
Scotty Creek.....	Scotty creek.....	879	656.5	Okanagan valley.
S. E. Kelowna.....	Hydraulic creek.....	4,626	2,275	Okanagan valley.
Trout Creek.....	Trout creek.....	354	276.16	Okanagan valley.
Vernon.....	Jones and Coldstream creeks.....	12,161	6,000	Okanagan valley.
Vinsulla.....	N. Thompson river.....	558	425	N. Thompson valley.
Westbank.....	Powers creek.....	726	556.14	Okanagan valley.
Winfield and Okanagan Centre.....	Vernon creek.....	2,000	1,814.93	Okanagan valley.
Wynndel.....	Duck creek.....	525	151	South end, Kootenay lake.
WATER-USERS' COMMUNITY (Co-OPERATIVE).				
Benvoulin.....	Mission creek.....	476	476	Okanagan valley.
Brent Davis.....	Mission creek.....	415.7	415.7	Okanagan valley.
Canyon.....	Camp Run and Association creeks.....	656	361.9	Near Creston.
Dog Creek.....	Dog creek.....	319	288.9	Upper Fraser valley.
Guisachan.....	Mission creek.....	332.5	332.5	Okanagan valley.
Kelowna.....	Mission creek.....	60	60	Okanagan valley.
Mission Creek.....	Mission creek.....	594	486	Okanagan valley.
Okanagan Mission (South)..	Bellevue creek.....	179	179	Okanagan valley.
Powers Creek.....	Powers creek.....	200	144	Okanagan valley.
Sawmill Creek.....	Bellevue creek.....	132.5	132.5	Okanagan valley.
Smithson-Alphonse.....	Mission creek.....	327	419.08	Okanagan valley.
South Kelowna.....	Mission creek.....	192	192	Okanagan valley.
South Vernon.....	Long Lake creek.....	207.6	207.6	Okanagan valley.
Trepanier.....	Trepanier creek.....	99.2	99.2	Okanagan valley.
Tronson.....	Long Lake creek.....	127.5	127.5	Okanagan valley.
Upper Bankhead.....	Mission and Kelowna creeks.....	108.8	108.8	Okanagan valley.

39.—Major Irrigation Projects in British Columbia, 1937—concluded.

Project.	Source of Supply.	Irrigable Area.	Irrigated Area.	Locality.
		acres.	acres.	
IRRIGATION COMPANIES.				
B.C. Fruitland Co.....	Jamieson creek and N. Thompson river....	6,000	2,627.37	Near Kamloops.
Columbia V. Irrigated Fruitlands Co.....	Bruce creek.....	3,780	1	Columbia valley.
Edgewater Irrigated Farms, Ltd.....	Vermilion creek.....	940	1	Columbia valley.
Okanagan Development and Orchard Co.....	Kelowna creek.....	907	651.2	Okanagan valley.
Woods Lake Water Co.....	Oyama creek.....	2,100	792.02	Okanagan valley.

¹ Not reported.

Average Values of Farm Lands.—Statistics showing the average values of farm lands in Canada in 1910 and from 1919 to 1937, are given in Table 40. The values are as estimated by crop correspondents and show the rise in land values between 1910 and 1920, the general decline with moderate fluctuations from 1920 to 1929, and the rapid fall since 1929 to a point below the 1910 level for the country as a whole.

40.—Average Values per Acre of Occupied Farm Lands¹ in Canada, as Estimated by Crop Correspondents, 1910 and 1919-37.

Province.	1910	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
P.E.I.....	31	51	49	46	45	51	40	45	46	41	44	43	42	34	31	32	34	31	31	34
N.S.....	25	41	43	35	34	31	33	37	36	37	34	36	30	29	28	26	27	31	35	32
N.B.....	19	32	35	28	32	32	27	34	31	30	31	35	28	26	24	24	24	25	28	26
Que.....	43	72	70	59	58	56	53	54	53	57	54	55	48	40	37	36	34	41	38	40
Ont.....	48	66	70	63	64	64	65	67	62	65	62	60	52	46	38	38	41	42	44	46
Man.....	29	35	39	35	32	28	28	29	29	27	27	26	22	18	16	16	17	17	16	17
Sask.....	22	32	32	29	28	24	24 ²	24	25	26	27	25	22	19	16	16	16	17	15	15
Alta.....	24	29	32	28	24	24	25	26	26	26	28	28	24	20	17	16	16	16	16	16
B.C.....	74	174	175	122	120	100	96	88	80	89	90	90	76	74	65	63	60	58	60	58
Totals...	33	46	48	40	40	37	37	38	37	38	38	37	32	28	24	24	23	24	24	24

¹ Orchards and fruit lands, 1937, with 1936 in parentheses: Nova Scotia \$96 (\$94); Ontario \$89 (\$88); British Columbia \$261 (\$266).

² Actual returns were not collected from crop correspondents in Saskatchewan for 1924, and the estimate of 1924 is interpolated.

Subsection 11.—International Agricultural Statistics.

World Production of Cereals and Potatoes.—Table 41, constructed from data published by the International Institute of Agriculture, shows the areas and yields of wheat, oats, barley, rye, corn, and potatoes for the years 1936 and 1937 in countries of the Northern Hemisphere, and for the years 1936-37 and 1937-38 in countries of the Southern Hemisphere. The annual average acreages and yields are also given for the five-year period, 1931-35 (1931-32 to 1935-36), and the areas and yields of 1937 (1937-38) are compared in percentages with those of the five-year period.

41.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1936 and 1937, with Five-Year Averages for 1931-35.

Crop and Country.	Acreages.				Yields.			
	1936. ¹	1937.	Average 1931-35.	1937 in p.c. of Average	1936. ¹	1937.	Average 1931-35.	1937 in p.c. of Average.
	'000 acres.	'000 acres.	'000 acres.	p.c.	'000 bu.	'000 bu.	'000 bu.	p.c.
Wheat—								
NORTHERN HEMISPHERE.								
EUROPE.								
Albania.....	90	87	92	94.9	1,129	1,293	1,684	76.8
Austria.....	624	642	554	116.0	14,040	14,469	13,327	108.6
Belgium.....	424	423	391	108.4	16,153	15,550	15,424	100.8
Bulgaria.....	2,955	2,861	3,023	94.6	60,350	56,492	50,985	110.8
Czechoslovakia.....	2,291	2,098	2,213	94.8	55,582	51,266	56,011	91.5
Denmark.....	296	319	272	117.3	11,267	13,595	12,023	113.1
Estonia.....	162	168	140	120.4	2,433	2,767	2,330	118.8
Finland.....	215	242	99	245.0	5,442	6,320	2,515	251.2
France.....	12,712	12,772 ²	13,276	—	254,616	247,270	316,685	78.1
Germany.....	5,151	4,879	5,471	89.2	162,659	161,192	176,664	91.2
Great Britain and Northern Ireland.....	1,805	1,835	1,617	113.5	55,265	56,186	55,811	100.7
Greece.....	2,065	2,118	1,755	120.7	19,537	32,373	21,908	147.8
Hungary.....	4,029	3,784	3,932	96.2	87,788	69,834	76,483	91.4
Irish Free State.....	255	220	70	314.6	7,839	—	2,817	—
Italy.....	12,693	12,820	12,260	104.6	224,568	296,009	267,140	110.8
Latvia.....	319	339	295	114.6	5,272	6,302	5,995	105.1
Lithuania.....	485	516	507	101.6	7,942	7,991	9,304	85.9
Luxemburg.....	45	45	34	131.2	1,070	1,190	863	138.0
Malta.....	10	9	9	99.3	236	326	274	119.0
Netherlands.....	374	320	315	101.6	15,575	12,959	13,922	93.1
Norway.....	75	79	38	203.5	2,094	2,524	1,034	244.1
Poland.....	4,305	4,183	4,333	96.5	78,357	67,607	72,580	93.1
Portugal.....	1,157	1,093	1,376	79.4	8,651	14,540	19,773	73.5
Roumania.....	8,481	8,618	7,893	109.2	128,716	136,001	96,579	140.8
Russia (U.S.S.R.).....	96,116	101,678	87,437	116.3	—	—	953,256	—
Spain.....	10,768	—	11,261	—	121,490	—	160,337	—
Sweden.....	695	726	701	103.6	21,524	26,495	23,773	111.5
Switzerland.....	172	174	149	117.1	4,470	6,162	4,963	124.2
Yugoslavia.....	5,463	5,269	5,112	103.1	107,421	86,252	78,048	110.5
AMERICA.								
Canada.....	25,289	25,570	25,630	99.8	229,218	182,505	346,876	52.6
Mexico.....	1,263	1,273	1,229	103.6	13,606	11,216	11,933	94.0
United States.....	48,863	64,460	51,894	124.2	626,766	873,993	679,636	128.6
ASIA.								
China.....	50,333	42,617	49,569	86.0	847,948	636,446	813,040	78.3
Chosen.....	818	839	800	104.9	8,078	11,041	9,118	121.1
Cyprus.....	190	185	176	105.2	1,842	2,140	1,838	116.4
India.....	33,639	33,222	33,825	98.2	351,680	366,165	350,448	104.5
Iraq.....	3,000	—	2,417	—	19,658	—	12,401	—
Japan.....	1,686	1,770	1,440	122.9	45,194	50,410	40,365	124.9
Manchoukuo.....	2,682	3,005	3,102	96.9	30,675	37,845	37,960	99.7
Syria and Lebanon.....	1,316	1,349	1,253	107.6	15,704	17,210	14,467	119.0
Turkey.....	8,843	8,323	7,983	104.3	138,496	140,311	92,884	151.1
AFRICA.								
Algeria.....	4,287	4,062	3,907	104.0	29,773	33,995	32,789	103.7
Egypt.....	1,464	1,421	1,549	91.8	45,701	45,376	43,822	103.5
Eritrea.....	40	—	14	—	414	—	86	—
French Morocco.....	3,194	2,743	3,019	90.9	12,234	18,372	29,255	62.8
Kenya.....	66	66	41	161.3	740	780	419	186.0
Libya.....	80	85	46	186.6	418	661	249	265.6
Tunis.....	1,221	2,429	2,019	120.3	8,083	17,637	14,256	123.7
SOUTHERN HEMISPHERE.⁴								
Argentina.....	17,503	18,909	17,954	105.3	249,196	191,983	225,766	85.0
Australia.....	12,351	13,735	13,982	98.2	150,106	161,954	171,898	94.2
Chile.....	1,917	1,898	1,826	103.9	28,702	—	29,450	—
New Zealand.....	225	188	273	68.9	7,169	5,730	8,293	69.1
Union of South Africa.....	2,133	1,751	1,763	99.3	16,077	10,867	14,470	75.1
Uruguay.....	986	1,259	1,116	112.8	9,246	15,037	11,421	131.7

¹ Most of the figures for 1936 have been revised since the publication of the 1937 Year Book.

² Winter crop only.

³ Not available.

⁴ In the Southern Hemisphere the annual statistics are for the crop years 1936-37 and 1937-38, and the averages are for the period 1931-32 to 1935-36.

41.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1936 and 1937, with Five-Year Averages for 1931-35—continued.

Crop and Country.	Acreages.				Yields.			
	1936. ¹	1937.	Average 1931-35.	1937 in p.c. of Average	1936. ¹	1937.	Average 1931-35.	1937 in p.c. of Average. ²
	'000 acres.	'000 acres.	'000 acres.	p.c.	'000 bu.	'000 bu.	'000 bu.	p.c.
Oats—								
NORTHERN HEMISPHERE.								
EUROPE.								
Albania.....	25	24	24	100.7	595	565	730	77.4
Austria.....	713	698	755	92.4	29,439	28,488	26,687	99.3
Belgium.....	534	521	648	80.5	38,111	35,839	47,640	75.2
Bulgaria.....	299	269	299	90.1	9,368	8,544	6,890	124.0
Czechoslovakia.....	1,888	1,920	1,972	97.4	83,938	94,547	91,928	102.8
Denmark.....	933	928	943	98.4	57,616	69,583	69,123	100.7
Estonia.....	341	358	350	102.3	7,842	9,900	9,706	102.0
Finland.....	1,087	1,122	1,142	98.3	44,864	46,159	46,295	99.7
France.....	8,134	7,952	8,312	95.7	290,354	313,989	329,626	95.3
Germany.....	6,866	7,030	7,791	90.2	387,074	404,304	422,261	95.7
Great Britain and Northern Ireland.....	2,514	2,298	2,632	87.3	138,652	112,280	149,382	75.2
Greece.....	335	415	336	123.2	6,502	9,755	7,013	139.1
Hungary.....	529	572	560	102.3	18,049	16,201	18,914	85.7
Irish Free State.....	559	573	617	92.8	36,188	2	41,283	—
Italy.....	1,075	1,069	1,093	97.9	32,952	42,591	38,015	112.0
Latvia.....	838	828	784	105.7	15,595	27,903	24,401	114.4
Lithuania.....	883	861	867	99.4	22,845	26,860	25,856	103.9
Luxemburg.....	65	65	69	94.1	2,612	2,887	3,132	92.2
Netherlands.....	333	358	339	105.7	21,836	29,438	19,615	150.1
Norway.....	210	211	231	91.4	11,797	13,314	11,983	111.1
Poland.....	5,572	5,672	5,458	103.9	181,887	166,035	172,675	96.2
Portugal.....	657	723	442	163.6	5,770	7,376	6,132	120.3
Roumania.....	1,986	1,906	2,035	93.7	58,362	26,211	45,144	58.1
Russia (U.S.S.R.).....	43,525	43,193	42,460	101.7	2	2	1,030,389	—
Spain.....	1,358	2	1,917	—	38,070	2	46,169	—
Sweden.....	1,654	1,641	1,629	100.7	85,291	86,476	80,484	107.4
Switzerland.....	26	27	35	77.5	1,375	1,605	2,022	79.4
Yugoslavia.....	890	846	902	93.8	22,942	20,517	20,394	98.2
AMERICA.								
Canada.....	13,118	13,049	13,468	96.9	288,764	291,622	370,342	98.7
United States.....	33,370	35,079	37,553	93.4	785,506	1,146,000	969,044	118.3
ASIA.								
China.....	2,628	2,428	2,497	97.3	62,129	58,732	59,941	98.0
Syria and Lebanon.....	28	27	30	87.6	752	741	868	85.4
Turkey.....	1,099	554	433	127.7	14,846	16,583	11,611	142.8
AFRICA.								
Algeria.....	473	477	476	100.3	12,090	8,957	9,160	97.8
French Morocco.....	80	94	66	142.4	1,328	2,894	1,552	186.5
Tunis.....	62	91	65	141.5	689	1,963	1,502	130.7
SOUTHERN HEMISPHERE.³								
Argentina.....	3,158	3,254	3,434	94.8	54,564	48,915	59,566	82.1
Chile.....	282	289	202	143.2	6,894	2	6,144	—
New Zealand.....	316	286	371	77.0	4,407	3,187	4,096	77.8
Union of South Africa.....	614	2	479	—	7,325	7,289	7,999	91.1
Uruguay.....	180	204	181	112.9	1,999	3,838	2,628	146.1

¹ Most of the 1936 figures have been revised since the publication of the 1937 Year Book.

² Not available. ³ In the Southern Hemisphere the annual statistics are for the crop years 1936-37 and 1937-38, and the averages are for the period 1931-32 to 1935-36.

41.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1936 and 1937, with Five-Year Averages for 1931-35—continued.

Crop and Country.	Acreages.				Yields.			
	1936. ¹	1937.	Average 1931-35.	1937 in p.c. of Average	1936. ¹	1937.	Average 1931-35.	1937 in p.c. of Average.
	'000 acres.	'000 acres.	'000 acres.	p.c.	'000 bu.	'000 bu.	'000 bu.	p.c.
Barley—								
NORTHERN HEMISPHERE.								
EUROPE.								
Albania.....	11	11	13	83.7	198	226	295	76.4
Austria.....	403	397	415	95.6	12,771	11,469	12,757	89.8
Belgium.....	74	61	86	71.1	3,642	3,929	4,199	93.6
Bulgaria.....	537	530	569	93.2	14,810	14,675	13,426	109.3
Czechoslovakia.....	1,565	1,658	1,680	98.7	46,797	51,214	55,354	92.5
Denmark.....	912	906	860	105.4	41,255	50,064	45,823	109.3
Estonia.....	250	220	263	83.7	3,989	3,765	4,750	79.3
Finland.....	324	324	312	103.7	8,676	7,992	8,245	96.9
France.....	1,837	1,765	1,795	98.3	46,807	45,758	48,993	93.4
Germany.....	4,041	4,235	3,958	107.0	156,122	162,886	149,663	108.8
Great Britain and Northern Ireland.....	894	908	959	94.7	34,150	30,567	36,649	82.7
Greece.....	511	566	536	105.6	7,058	10,341	8,892	116.3
Hungary.....	1,161	1,180	1,152	102.4	30,238	21,692	28,818	75.3
Irish Free State.....	130	131	124	105.7	5,707	²	5,908	—
Italy.....	482	483	510	94.7	8,845	10,728	10,300	104.2
Latvia.....	468	449	458	98.0	7,580	10,032	9,202	109.0
Lithuania.....	529	529	501	105.5	10,683	11,353	11,185	101.5
Luxemburg.....	5	5	8	66.3	134	142	207	68.7
Malta.....	5	²	6	—	173	²	236	—
Netherlands.....	106	122	69	177.7	5,559	6,439	3,573	180.2
Norway.....	149	149	143	103.8	5,273	5,967	5,042	118.3
Poland.....	2,933	3,046	2,993	101.8	64,367	60,169	66,447	90.6
Portugal.....	193	194	171	113.2	1,603	31,994	1,962	101.7
Roumania.....	3,980	3,780	4,411	85.7	74,033	39,732	60,270	65.7
Russia (U.S.S.R.).....	20,150	21,574	18,869	114.3	²	²	303,607	—
Spain.....	4,528	²	4,683	—	78,523	²	109,968	—
Sweden.....	255	255	270	94.2	9,175	8,970	9,889	90.7
Switzerland.....	10	11	15	70.3	322	377	528	71.4
Yugoslavia.....	1,051	1,030	1,043	98.7	19,421	17,590	18,665	94.2
AMERICA.								
Canada.....	4,432	4,331	3,741	115.8	71,922	85,969	71,846	119.7
United States.....	8,372	9,959	10,596	94.0	147,475	219,635	210,785	104.2
ASIA.								
China.....	16,162	14,721	16,329	90.1	373,756	292,642	361,551	80.9
Chosen.....	2,616	2,685	2,481	108.2	46,442	62,734	47,038	133.4
Cyprus.....	110	109	107	102.4	1,891	2,237	1,618	138.3
Iraq.....	2,000	²	1,270	—	25,262	²	13,435	—
Japan.....	1,918	1,866	1,979	94.3	68,955	72,349	75,688	95.6
Syria and Lebanon.....	727	795	766	103.7	14,151	15,019	13,170	114.0
Turkey.....	4,484	4,408	3,762	117.2	105,810	104,949	68,522	153.2
AFRICA.								
Algeria.....	3,120	2,951	3,240	91.1	29,480	26,015	34,347	75.7
Egypt.....	282	271	308	88.0	10,825	10,571	10,098	104.7
Eritrea.....	91	²	56	—	916	²	689	—
French Morocco.....	4,104	4,201	3,684	114.0	70,108	34,907	52,444	66.6
Libya.....	179	243	407	59.7	543	1,837	2,124	86.5
Tunis.....	741	1,532	1,240	123.5	3,445	9,186	10,472	87.7
SOUTHERN HEMISPHERE.								
Argentina.....	1,925	1,942	1,746	111.2	29,855	24,803	28,530	86.9
Chile.....	178	213	161	132.7	4,519	²	4,987	—
New Zealand.....	26	30	27	111.6	778	865	637	135.6
Union of South Africa.....	73	²	76	—	1,337	1,434	1,313	100.3
Uruguay.....	28	45	18	241.6	309	590	268	219.8

¹ Most of the figures for 1936 have been revised since the publication of the 1937 Year Book. ² Not available. ³ In the Southern Hemisphere the annual statistics are for the crop years 1936-37 and 1937-38, and the averages are for the period 1931-32 to 1935-36.

41.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1936 and 1937, with Five-Year Averages for 1931-35—continued.

Crop and Country.	Acreages.				Yields.			
	1936. ¹	1937.	Average 1931-35.	1937 in p.c. of Average	1936. ¹	1937.	Average 1931-35.	1937 in p.c. of Average.
	'000 acres.	'000 acres.	'000 acres.	p.c.	'000 bu.	'000 bu.	'000 bu.	p.c.
Rye—								
NORTHERN HEMISPHERE.								
EUROPE.								
Albania.....	7	8	7	115.7	116	114	132	86.4
Austria.....	921	891	947	94.1	18,608	16,830	23,447	71.8
Belgium.....	385	378	479	78.9	14,060	13,583	18,944	71.7
Bulgaria.....	489	456	517	88.1	8,188	8,293	8,714	95.2
Czechoslovakia.....	2,494	2,390	2,512	95.2	56,549	58,447	69,374	84.2
Denmark.....	327	343	350	98.1	7,842	9,448	9,804	96.4
Estonia.....	338	368	363	101.4	6,044	8,109	7,507	108.0
Finland.....	593	598	570	105.0	12,755	16,299	13,871	117.5
France.....	1,634	1,636	1,712	95.6	28,150	29,152	32,218	90.5
Germany.....	11,154	10,270	11,056	92.9	290,793	266,217	305,945	87.0
Greece.....	160	176	178	98.7	1,654	2,579	2,267	113.8
Hungary.....	1,607	1,516	1,568	96.7	28,115	22,945	28,532	80.4
Irish Free State.....	2	2	3	66.2	68	2	85	—
Italy.....	261	259	285	91.0	5,204	5,701	6,281	90.8
Latvia.....	637	713	627	113.8	11,260	16,592	12,385	134.0
Lithuania.....	1,216	1,259	1,231	102.3	21,313	23,658	22,407	105.6
Luxemburg.....	19	19	19	101.3	449	392	481	81.4
Netherlands.....	554	557	449	124.0	19,059	19,511	16,371	119.2
Norway.....	15	15	15	94.9	425	465	443	104.9
Poland.....	14,410	14,141	14,160	99.9	250,541	229,518	251,701	91.2
Portugal.....	388	569	376	151.1	3,466	4,642	4,595	101.0
Roumania.....	1,041	1,060	939	112.9	17,842	16,697	12,613	132.4
Russia (U.S.S.R.).....	2	2	62,627	—	2	2	863,667	—
Spain.....	1,471	2	1,466	—	18,053	2	21,697	—
Sweden.....	530	519	547	94.8	13,891	16,984	16,773	101.3
Switzerland.....	38	37	42	89.1	1,077	1,213	1,381	87.8
Yugoslavia.....	628	627	615	102.1	8,002	8,239	8,202	100.5
AMERICA.								
Canada.....	635	894	712	125.6	4,281	5,749	6,456	89.0
United States.....	2,774	3,839	3,021	127.1	25,319	49,449	33,977	145.5
ASIA.								
Turkey.....	909	875	670	130.6	17,660	18,822	10,400	181.0
AFRICA.								
Algeria.....	4	4	3	114.4	29	41	31	134.0
French Morocco.....	7	2	3	—	35	2	22	—
SOUTHERN HEMISPHERE. ³								
Argentina.....	2,204	2,184	1,731	126.2	7,480	4,527	10,047	45.1
Corn—								
NORTHERN HEMISPHERE.								
EUROPE.								
Albania.....	207	219	195	112.4	4,549	4,514	4,327	104.3
Austria.....	158	159	158	100.4	6,727	7,134	5,340	133.6
Bulgaria.....	1,653	1,653	1,757	94.1	34,310	33,020	35,629	92.7
Czechoslovakia.....	403	456	365	124.9	12,361	13,511	8,347	161.9
France.....	844	839	844	99.4	20,914	21,557	20,095	107.3
Greece.....	639	652	614	106.1	11,297	9,085	8,244	110.2
Hungary.....	2,810	2,956	2,812	105.1	102,086	105,977	73,033	145.1
Italy.....	3,626	3,632	3,590	101.2	120,117	133,853	104,528	128.1
Poland.....	218	228	232	98.2	4,132	2	3,684	—
Portugal.....	1,057	2	1,014	—	12,084	2	13,778	—
Roumania.....	12,999	12,795	12,124	105.5	220,936	166,734	211,299	78.9
Spain.....	2	2	1,076	—	2	2	27,929	—
Switzerland.....	2	2	2	—	83	2	98	—
Yugoslavia.....	6,683	6,529	6,215	105.1	203,949	209,951	155,561	135.0

¹ Most of the figures for 1936 have been revised since the publication of the 1937 Year Book.² Not available.³ In the Southern Hemisphere the annual statistics are for the crop years 1936-37 and 1937-38 and the averages are for the period 1931-32 to 1935-36.

41.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1936 and 1937, with Five-Year Averages for 1931-35—concluded.

Crop and Country.	Acreages.				Yields.			
	1936. ¹	1937.	Average 1931-35.	1937 in p.c. of Average	1936. ¹	1937.	Average 1931-35.	1937 in p.c. of Average.
	'000 acres.	'000 acres.	'000 acres.	p.c.	'000 bu.	'000 bu.	'000 bu.	p.c.
Corn—concluded.								
AMERICA.								
Canada.....	164	166	145	113.9	6,083	6,492	6,025	107.8
United States.....	93,020	93,810	102,079	91.9	1,507,089	2,645,000	2,334,271	113.3
ASIA.								
China.....	11,506	2	11,185	—	241,333	2	248,140	—
Manchoukuo.....	3,199	3,506	2,736	123.1	83,522	81,886	68,416	119.7
Syria and Lebanon.....	37	48	59	80.7	719	1,052	1,045	100.7
Turkey.....	1,041	988	987	100.2	27,000	23,349	19,059	122.5
AFRICA.								
Algeria.....	16	16	21	76.9	137	140	225	62.3
Egypt.....	1,579	1,597	1,829	87.3	62,806	64,624	68,147	94.8
Eritrea.....	20	2	26	—	161	2	382	—
French Morocco.....	1,124	1,087	911	119.4	11,865	5,236	6,148	85.2
Kenya.....	91	118	136	87.3	3,084	3,997	3,307	120.8
Tunis.....	44	67	48	139.3	138	236	232	101.7
SOUTHERN HEMISPHERE. ³								
Argentina.....	15,973	15,185	16,266	93.4	359,621	2	334,718	—
Chile.....	121	2	121	—	2,670	2	2,717	—
Union of South Africa.....	5,808	2	5,839	—	88,618	2	60,669	—
Potatoes—								
NORTHERN HEMISPHERE.								
EUROPE.								
Austria.....	519	538	496	108.3	87,032	118,313	94,648	125.0
Belgium.....	396	392	413	95.1	118,512	113,567	132,086	86.0
Bulgaria.....	39	43	35	123.7	3,996	4,946	3,074	160.9
Czechoslovakia.....	1,876	1,906	1,824	104.5	393,215	397,428	326,687	121.7
Denmark.....	187	200	179	111.7	47,343	49,236	44,808	109.9
Estonia.....	183	187	172	108.4	37,868	33,663	32,122	104.4
Finland.....	215	230	197	116.7	48,596	49,162	41,531	118.7
France.....	3,513	3,512	3,487	100.7	560,367	540,941	577,444	93.0
Germany.....	6,901	7,136	7,043	101.3	1,702,072	2,032,250	1,636,908	117.9
Great Britain and Northern Ireland.....	722	715	760	94.1	171,309	151,125	186,435	81.1
Greece.....	48	58	42	137.7	4,740	5,831	3,475	167.8
Hungary.....	733	731	715	102.2	90,068	95,497	61,522	155.2
Irish Free State.....	334	327	343	95.4	90,387	2	93,829	—
Italy.....	979	965	1,004	96.1	87,368	105,517	88,524	119.2
Latvia.....	296	314	266	118.2	59,210	65,476	49,101	133.3
Lithuania.....	450	456	435	104.9	76,250	92,196	73,532	125.4
Luxemburg.....	41	41	41	100.9	7,352	8,173	6,950	117.6
Malta.....	10	2	7	—	851	2	902	—
Netherlands.....	322	336	384	87.5	92,099	91,858	111,113	82.7
Norway.....	127	128	120	106.5	34,753	33,514	33,092	101.3
Poland.....	7,150	7,360	6,821	107.9	1,259,601	1,388,889	1,140,984	121.7
Portugal.....	78	2	79	—	18,985	2	21,791	—
Roumania.....	535	533	490	108.8	71,370	2	62,500	—
Spain.....	2	2	1,087	—	2	2	182,022	—
Sweden.....	330	329	328	100.3	67,098	64,925	68,753	94.4
Switzerland.....	117	121	114	105.7	20,868	29,949	27,633	108.4
Yugoslavia.....	648	2	612	—	59,818	2	52,654	—
AMERICA.								
Canada.....	496	531	543	97.7	65,057	71,055	73,744	96.4
United States.....	3,058	3,177	3,513	90.4	329,997	391,159	379,068	103.2
ASIA.								
Syria and Lebanon.....	18	19	18	103.3	1,467	1,680	1,478	113.7
Turkey.....	130	2	108	—	6,593	2	4,460	—
AFRICA.								
Algeria ⁴	41	38	43	88.4	4,257	2	3,371	—

¹ Most of the figures for 1936 have been revised since the publication of the 1937 Year Book. ² Not available. ³ In the Southern Hemisphere the annual statistics are for the crop years 1936-37 and 1937-38, and the averages are for the period 1931-32 to 1935-36. ⁴ Early potatoes.

World Exports and Imports of Wheat and Flour.—Statistics showing the exports and imports of wheat and wheat flour for the principal countries of the world in the crop year ended July 31, 1937, with comparative figures for the previous crop year, are shown in Table 42. This information is taken from data published by the International Institute of Agriculture. During the crop year 1936-37, a total of 670,458,500 bushels of wheat and wheat flour expressed in bushels of wheat is shown as exported, as compared with 598,736,000 bushels in the previous year.

42.—Exports of Wheat and Flour from the Principal Wheat-Exporting Countries and Imports of Wheat and Flour into the Principal Wheat-Importing Countries, crop years ended July 31, 1936 and 1937.

Wheat.	Twelve Months Aug. 1-July 31.		Flour.	Twelve Months Aug. 1-July 31.	
	1935-36. ¹	1936-37.		1935-36. ¹	1936-37.
	'000 bu.	'000 bu.		'000 bbl.	'000 bbl.
Exports—			Exports—		
United States.....	272	5,287	United States.....	3,435	3,892
Canada.....	232,020	174,858	Canada.....	4,979	4,526
Argentina.....	65,689	155,767	Argentina.....	898	1,095
Australia.....	73,224	73,627	Australia.....	6,197	5,645
Hungary.....	14,333	21,868	India.....	204	436
Bulgaria.....	1,139	7,708	Hungary.....	636	690
Yugoslavia.....	613	17,977	Japan.....	1,881	848
Other countries.....	92,628	101,690	Other countries.....	8,174	7,685
Totals.....	479,918	558,782	Totals.....	26,404	24,817
Imports—			Imports—		
Germany.....	3,564	31,016	Germany.....	16	244
Belgium.....	40,529	43,744	Austria.....	386	261
France.....	26,850	14,331	Denmark.....	111	82
Great Britain and Northern Ireland.....	190,664	184,469	Finland.....	350	245
Irish Free State.....	14,588	12,200	Great Britain and Northern Ireland.....	4,861	4,842
Italy.....	15,240	68,018	Irish Free State.....	81	71
Netherlands.....	18,942	18,996	Norway.....	451	466
Sweden.....	1,683	1,914	Netherlands.....	616	726
Switzerland.....	16,670	17,727	Czechoslovakia.....	12	5
Czechoslovakia.....	2,170	321	Egypt.....	53	25
Japan.....	12,805	6,570	Other countries.....	6,983	5,105
Other countries.....	84,037	134,319			
Totals.....	427,742	533,625	Totals.....	13,920	12,072

¹ Most of the figures for 1935-36 have been revised since the publication of the 1937 Year Book.

World Live Stock.—The statistics of Table 43, compiled from data published by the International Institute of Agriculture, show as nearly as possible the world situation with regard to live stock about 1935. For many countries, the figures are the result of careful enumeration, while for others they represent only approximate estimates. In the cases of Mexico, Argentina, Chile, and Kenya, the figures are for 1930, as are also those for horses in Uruguay, the Union of South Africa, and Santo Domingo, those for swine in Uruguay and Santo Domingo and those for cattle in the latter country. Earlier figures are: Peru (1929); Bulgaria (1926); Venezuela (swine, 1925; cattle, 1922; horses and sheep, 1921); Santo Domingo (sheep, 1924); Siam (swine, 1921).

43.—Numbers of Live Stock in Principal Countries, circa 1935.

Continent and Country.	Horses.	Cattle.	Sheep.	Swine.
Europe—				
Austria.....	261,200	2,348,627	263,400	2,822,966
Belgium.....	231,400 ¹	1,837,500	187,400	1,284,500
Bulgaria.....	482,200	1,817,437	8,739,800	1,002,100
Czechoslovakia.....	695,000	4,283,100 ²	547,000	2,744,700
Denmark. ³	520,600	3,071,700	174,600	3,036,500
Finland.....	360,600	1,822,000	1,024,300	509,900

For footnotes, see end of table, p. 280.

43.—Numbers of Live Stock in Principal Countries, *circa* 1935—concluded.

Continent and Country.	Horses.	Cattle.	Sheep.	Swine.
Europe—concluded.				
France.....	2,810,000 ⁴	15,669,700	9,558,100	7,043,300
Germany.....	3,389,900 ⁴	18,937,900	3,927,700	22,826,600
Great Britain and Northern Ireland.....	1,120,400	8,658,900	25,061,700	4,531,500
Greece.....	361,400	957,200	8,185,100	623,600
Hungary.....	806,600	1,749,000	1,227,500	3,175,800
Irish Free State.....	420,000	4,019,500	3,041,700	1,087,700
Italy.....	816,300 ⁴	7,235,500	8,862,500	3,205,700
Latvia.....	384,400	1,274,900	1,346,700	803,100
Lithuania.....	558,100	1,168,500	627,900	1,201,100
Netherlands.....	288,000	2,639,500	680,200	1,523,800
Norway ³	182,600	1,328,200	1,736,700	410,000
Poland.....	3,760,000 ⁴	9,759,300 ⁴	2,802,400	6,722,500
Portugal.....	90,300	905,200	3,274,000	1,206,000
Roumania.....	2,166,600 ⁴	4,327,200	11,838,300	2,970,400
Spain.....	568,100	3,569,800	19,093,319	5,411,535
Sweden.....	611,200	2,918,900	443,800	1,293,100
Switzerland.....	139,500	1,590,000	175,400	1,088,300
Russia (U.S.S.R.).....	15,881,300	49,255,600	54,228,100	22,550,100
Yugoslavia.....	1,200,800 ¹	3,982,400 ³	9,211,100 ³	2,931,900 ¹
Northern and Central America—				
Canada.....	2,931,300	8,820,600	3,399,100	3,549,200
Cuba.....	568,700	4,515,170	163,900	951,779
Santo Domingo (Dominican Republic).....	150,000	900,000	161,900	1,100,000
Mexico.....	1,887,500	10,083,000	3,673,900	3,698,200
United States ¹	11,635,000	67,968,000	52,022,000	42,837,000
South America—				
Argentina.....	9,858,100	30,867,900	39,329,781	3,768,700
Brazil.....	6,131,700	40,863,900	13,049,100	24,773,600
Chile.....	441,000	2,387,900	6,263,500	331,200
Colombia.....	972,000	8,337,100	872,400	1,621,900
Peru.....	432,100	1,805,900	11,209,200	688,700
Uruguay.....	622,900	7,372,400	15,405,607	307,900
Venezuela.....	167,700	2,278,000	113,400	512,100
Asia—				
British India.....	2,344,400	160,365,700	43,846,500	¹²
Formosa.....	500	84,700	300	1,873,200
Indo-China.....	90,500	1,977,200	15,600	3,544,000
Iraq.....	¹²	¹²	4,384,700	¹²
Japan.....	1,464,300	1,614,800	36,000	980,700
Korea.....	52,600	1,679,500	9,400	1,616,400
Netherlands East Indies ⁵	642,000	4,515,600	1,803,578	994,916
Philippines.....	391,000	1,483,300	135,900	2,976,500
Siam.....	355,100	5,314,200	¹²	864,200
Syria and Lebanon.....	66,800	367,600	2,055,600	5,500
Turkey in Europe and Asia.....	600,600	5,370,200	12,435,600	¹²
Africa—				
Algeria.....	180,800	840,000	6,416,000	56,000
Egypt ⁶	33,500	953,100	1,429,600	13,800
French Morocco ⁷	221,000	2,074,600	9,283,600	90,000
French West Africa ⁸	178,000	3,337,900	8,404,400	89,100
Kenya.....	2,400	5,192,900	3,227,700	14,600 ⁹
Madagascar.....	2,300	5,559,100 ⁷	207,200	498,100
Nigeria ¹⁰	184,300	2,688,135	1,600,100	49,400
Southern Rhodesia.....	2,800	2,460,900	312,400	100,200
Territory of South West Africa.....	20,900	665,900	1,024,400	8,100
Tanganyika.....	100	4,793,000	4,478,000 ¹¹	8,300
Tunis.....	101,900	441,200	3,210,000	26,500
Union of South Africa.....	867,600	10,575,000	35,996,200	965,000
Oceania—				
Australia.....	1,767,800	14,048,700	113,048,000	1,158,300
New Zealand.....	273,000	4,293,500	29,076,800	762,800

¹ On farms only. ² Cattle and buffaloes. ³ In rural districts only. ⁴ Exclusive of animals belonging to the Army. ⁵ Animals owned by natives only. ⁶ Exclusive of animals belonging to the British Army. ⁷ Number registered for fiscal purposes. ⁸ Incomplete figures. ⁹ Swine belonging to Europeans only. ¹⁰ Includes only northern provinces of Nigeria and Northern Cameroons. ¹¹ Sheep and goats. ¹² Not available.

CHAPTER IX.—FORESTRY.*

NOTE.—A short article on "Physiography, Geology and Climate as Affecting the Forests" was published at pp. 311-313 of the 1934-35 Year Book.

Section 1.—Forest Regions.

The forests of Canada cover a vast region in the north temperate climatic zone, reaching from the Atlantic ocean to the Pacific; they extend northward from the International Boundary to beyond the Arctic Circle. Wide variations in climatic, physiographic, and soil conditions cause marked differences in the character of the forests in different parts of the country, hence more or less well-defined forest regions may be recognized. The following principal regions are described separately: Acadian, Great Lakes-St. Lawrence, Deciduous, Boreal, Sub-Alpine, Columbia, Montane, and Coast. For descriptive purposes, it is convenient to consider two sections of the Boreal Region as separate entities, and they are described hereunder as the Northern Transition, and the Aspen Grove Sections.

The Acadian Forest Region.—This region includes all of the provinces of Nova Scotia and Prince Edward Island, and all but the northwest corner of New Brunswick. Its climate is characteristic of maritime regions, and is highly favourable to tree growth. Annual precipitation averages about 40 inches. Topography and geology are widely varied. In northern New Brunswick the maximum altitude is 2,700 feet above sea-level, and northern Cape Breton island and parts of Nova Scotia are fairly rough. The surface of the remainder of the region varies from level to gently rolling.

There is a general coniferous character to the region, especially in the northern parts of New Brunswick and Cape Breton island. Mixed forests, interspersed by so-called "hardwood ridges", are common, however, occurring more frequently in the southern parts of New Brunswick and Nova Scotia.

Among the coniferous species red spruce is the characteristic dominant, and is usually associated with balsam fir. White and black spruce, and white and red pine, are widely distributed. Jack pine occurs in pure stands on sandy plains. Hemlock, which is still to be found in most parts of the region, is believed to have been much more important in previous times. Other characteristic conifers are cedar and tamarack.

Yellow birch, maple, and beech occur in fairly large quantities and usually occupy well-drained ridges. White birch and poplar are found in association with the coniferous species. Among the other hardwoods are oak, butternut, basswood, ash, and elm.

The Great Lakes-St. Lawrence Forest Region.—This forest, centring on the Great Lakes system, and extending eastward down the St. Lawrence valley, is of an irregular character. It occupies a middle position between predominantly coniferous forests to the north and the deciduous forests to the south. Precipitation varies from an annual average of 25 inches in the west to 45 inches in the east, and

* Material in this chapter has been prepared by R.G. Lewis, B.Sc. F., Chief of the Forestry Branch of the Dominion Bureau of Statistics, in co-operation with Roland D. Craig, F.E., of the Dominion Forest Service of the Department of Mines and Resources. Section I is based on Dominion Forest Service Bulletin No. 85, "A Forest Classification for Canada", by W. E. D. Halliday. The Forestry Branch of the Bureau of Statistics collects and compiles statistics relating to forest production and publishes four annual printed reports covering the lumber industry, the pulp and paper industry, and the wood-using and paper-using industries of Canada. These printed reports are usually preceded by a number of preliminary mimeographed reports, one for each important industry or group of industries. For detailed list of publications, see Chapter XXIX.

the growing season is from 100 to 150 days. Good forest soils of sedimentary origin are common, but southward extensions of the granitic areas of the Canadian Shield are also included within the boundaries of the region.

The characteristic species are white pine, red pine, and hemlock, associated with the maples, yellow birch, and, in some sections, beech and basswood. Aspen, cedar, and jack pine are widely distributed, and spruce and balsam fir are common in certain localities. Among the less widely distributed hardwood species are white birch, elm, hickories, white and black ash, oak, ironwood, butternut, and black walnut.

The pine forests of the Ottawa valley and Algonquin areas have been famous as one of the greatest of Canada's lumbering areas. Elsewhere in the region, forests of mixed type predominate, with a considerable proportion of pure hardwood stands in the more favoured locations towards the south.

The Deciduous Forest Region.—This region in Canada consists of a small northerly intrusion from the great forest of the same type in the United States, and occupies the southwestern portion of what is commonly referred to as the Ontario peninsula. It enjoys very favourable climatic and soil conditions which permit of the growth of a number of tree species not found elsewhere in Canada. Because of its fertile soil, the area is completely settled, and the forests are now represented only by woodlots, parks, and small wooded areas on the lighter soils.

Among the characteristic trees are beech and sugar maple, together with basswood, red maple, and several oaks. Coniferous species are largely represented by scattered specimens of white pine, hemlock, and juniper.

Among the less common hardwoods, which occur singly or in small groups, are hickories, black walnut, chestnut, tulip tree, magnolia, mulberry, sycamore, sassafras, black gum, Kentucky coffee tree, and a number of other species which find their northern limit in this region.

The Boreal Forest Region.—This region covers the greater part of the land area of Canada. It stretches unbrokenly from the Atlantic coast of Quebec westward to Alaska. Along its southern side it follows the limits of the Great Lakes-St. Lawrence Region, then skirts the open grasslands of the Prairie Provinces, and is terminated in the west in the foothills of the Rocky mountains. To the north it is bounded by the limits of tree growth.

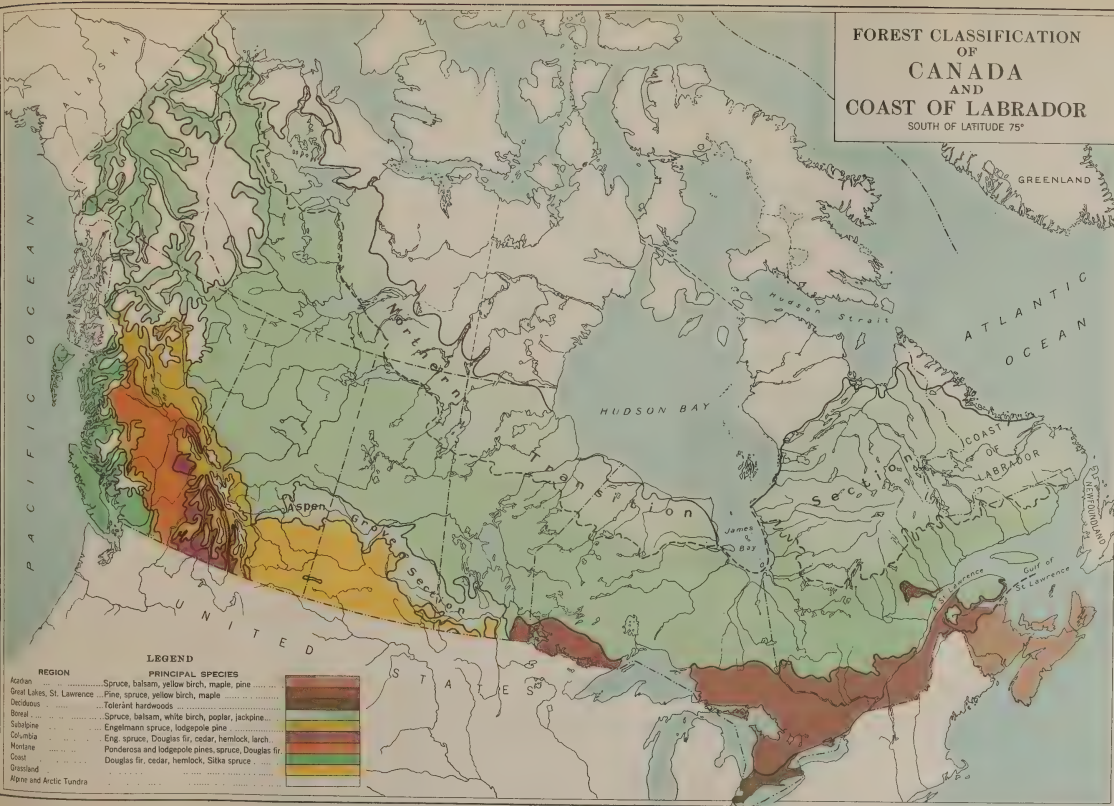
The principal trees of the region are white and black spruce, balsam fir, poplars, white birch, and jack pine. Near the foothills of the Rocky mountains the latter species is replaced by lodgepole pine. In Quebec and Ontario, and as far west as a line running from lake Winnipeg to lake Athabaska in the Prairie Provinces, the region is, for the most part, underlain by granitic rocks of the Precambrian formations known as the Canadian Shield. Within the area described there are extensive tracts of good soil, formed from glacial or sedimentary deposits, but a larger portion of the region is characterized by shallow soils. Very considerable areas of bare rock testify to the disastrous results of forest fires followed by erosion. The forests of this part of the region are mainly coniferous, with black spruce and balsam fir as dominants, and are valuable chiefly for pulpwood.

West of lake Winnipeg the same tree species are in evidence but in different proportions. Here the soil is deep and relatively fertile, and the characteristic forest is a mixture of poplar and white spruce.

The climate of the region is severe, and precipitation ordinarily varies from 15 to 30 inches annually, although these amounts are exceeded in eastern Quebec.

FOREST CLASSIFICATION OF CANADA AND COAST OF LABRADOR

SOUTH OF LATITUDE 75°



Forest information prepared by the Dominion Forest Service. Base map and lithographic plates from Surveyor General's Office, Ottawa. Printed by the Geographical Section, General Staff, Department of National Defence.

The Northern Transition Section.—This area is a part of the Boreal Region, but is described separately because none of its forests is of commercial value although of considerable local economic value. It represents a transition from the merchantable forests of the south to the treeless wastes of the far north. White and black spruce, larch, and birch are the principal tree species, and these are usually of stunted growth because of the severity of the climate. In river valleys and other protected sites occasional clumps of trees of fair size are to be found. The principal economic value of the forests probably consists in the habitat which they provide for fur-bearing animals, and the wood they furnish for fuel and buildings for the scattered inhabitants of the region.

The Aspen Grove Section.—This section, which lies entirely within the Prairie Provinces, is also a part of the Boreal Region, but has very special characteristics. It is a zone of transition between the true forest region to the north and the open grasslands to the south. Aspen is the dominant tree, and is in sole possession of most of the area. In southern Manitoba stands of bur oak are found, and elm and ash occur singly or in small groups in river bottoms. Most of the area is farmed and much of the forest is now in the form of woodlots.

The Sub-Alpine Forest Region.—This is essentially a coniferous forest extending from the grasslands of the prairies and the western border of the Boreal Region up the east slopes of the Rockies to timber-line. This same type of forest reappears in a narrow strip extending northwesterly from the International Boundary between the plateaux of the Montane Region and the non-forested tundra formation of the mountain tops of the Coast ranges.

In general, this forest formation occupies areas from 3,500 to 6,000 feet above sea-level. Rainfall is moderate, temperatures are low, and the growing season is short. The topography is mountainous with steep-sided valleys, and the soils are mostly derived from glacial and other residual material. The dominant tree species are Englemann spruce and alpine fir, lodgepole pine, and aspen. Less widely distributed are mountain hemlock, alpine larch, and white-barked pine.

The Columbia Forest Region.—This region, often referred to as the Interior Wet Belt of British Columbia, supports forests which are somewhat similar in composition to those of the Coast Region.

The forests properly attributable to the Columbia Region comprise stands in the valleys of the Columbia and other rivers which lie between elevations of 2,500 feet and 4,000 feet above sea-level. Below this range occurs the Montane Region, and above it the Sub-Alpine. The climate is intermediate between those of the Coast and Montane Regions. The precipitation varies from 30 to 60 inches. The region should actually be mapped as a series of 'islands' and 'stringers' surrounded by patches of Sub-Alpine forest; but it is impracticable to do this on so small a scale as is used for the map facing page 284.

Some authorities consider the Columbia Region to be merely an extension of the Coast Forest Region. Because of the complete physical separation of the two regions in Canada, and also because of important differences in environmental conditions, the division made here has been adopted.

The principal species in this region are Englemann spruce, western red cedar, western hemlock, and Douglas fir. Among other species of considerable importance are alpine and grand firs, western white pine, and western larch. Lodgepole pine commonly replaces stands destroyed by fires. Black cottonwood is found on rich alluvial soils.

The Montane Forest Region.—This region forms part of what is often termed the Interior Dry Belt of British Columbia. It occupies an extensive series of plateaux, valleys, and ranges in the interior of the province, which extends northward from the International Boundary to the valley of the Skeena river. The climate is relatively dry, with low summer rainfall, and moderate to high temperatures. The driest conditions are found in the lower river valleys, where the forest gives way to open grassland.

The principal tree species are ponderosa pine, Douglas fir, lodgepole pine, and aspen. Towards the northern limits of the region ponderosa pine disappears and associations of Douglas fir and lodgepole pine become dominant. Towards the north and east, stands of Engelmann spruce and alpine fir grade into the forests of the Sub-Alpine and Columbia Regions. Aspen is an important constituent of the northern parts of this forest.

The Coast Forest Region.—This region includes the western slope of the Coast and Cascade mountains and the insular system, the higher elevations of which form Vancouver island, the Queen Charlotte group and other islands along the coast.

The climate in this region is mild and equable, with heavy precipitation varying from 40 to 200 inches per annum, about 70 p.c. of which falls during the autumn and winter months. These conditions are conducive to the luxurious growth of coniferous forests, and produce the largest trees and the heaviest stands in the Dominion.

The dominant trees are western hemlock and western red cedar. Associated with these are Douglas fir in the south and Sitka spruce in the north. All four of these species, of which the most important commercially is Douglas fir, grow to large sizes, and occasionally are found in stands running up to 100,000 ft. b.m. per acre. Other conifers which occur in the region but are of much less importance include yellow cedar; mountain hemlock; amabilis, grand, and alpine firs; and western white pine. Of the broad-leaved trees, several alders are widely distributed, and Garry oak and madrona are found in the vicinity of the straits of Georgia. Broad-leaved maple and vine maple occur at low elevations in the southern sections, and black cottonwood, which is perhaps the most important hardwood from the commercial point of view, is found on alluvial soils in the valleys.

Section 2.—Important Tree Species.

In Canada there are approximately 125 species or distinct varieties of trees. Only 33 of these are conifers commonly known as "softwoods", but they comprise over 80 p.c. of the standing timber and 70 p.c. of the wood utilized for all purposes. While the number of deciduous-leaved or "hardwood" species is large, only about a dozen are of a commercial importance comparable with that of about two dozen species of conifers.

For descriptions of the individual tree species, the reader is referred to pp. 283-286 of the Canada Year Book, 1936, where the chief tree species were covered, and to Dominion Forest Service Bulletin No. 61, "Native Trees of Canada", published by the Department of Mines and Resources, where the subject is treated in detail.

Section 3.—Forest Resources.

Areas.—The total land area of Canada, revised according to the latest surveys, is estimated at 3,466,556 square miles, of which 549,700 square miles is considered as being suitable for agricultural or pastoral purposes. About 254,873 square

miles of this agricultural land is occupied and of this 213,236 square miles is classified as improved and under pasture and 41,637 square miles as forested.

On p. 60, the area of forested lands is shown in detail. It will be seen that the total area covered by existing forests is 1,223,522 square miles, including 41,637 square miles of occupied agricultural land still forested. Most of this will, no doubt, be left under forest cover in the form of farmers' woodlots. There is also a considerable area of forest land which is of agricultural value and will eventually be cleared, but it is estimated that 1,100,000 square miles is essentially forest land which can best be utilized for forest production. The accessible and productive forest area is estimated to be 769,463 square miles, of which 360,548 square miles carries timber of merchantable size and on 408,915 square miles there is young growth which, if protected from fire, will eventually produce merchantable timber. The remaining area of 454,059 square miles carries forests of value either because of their influence on water control, climatic conditions, game conservation, or by reason of their attraction to tourists and their value as a source of wood for local use. On account of their geographical location or because of unfavourable growth conditions these forests at present are considered as non-productive from a commercial viewpoint.

As a result of the constant and inevitable improvement in conditions affecting profitable exploitation, such as the extension of settlement and transportation facilities, the increasing world scarcity of forest products, and the ever-increasing demand for these products, due to the development of industry, the discovery of new uses for wood, and the improvements in the methods, equipment and machinery used in logging and manufacturing forest products, some of this inaccessible timber will eventually become commercially exploitable. It is estimated that of the accessible forest area 442,354 square miles is producing softwood or coniferous timber, 221,138 square miles mixed softwoods and hardwoods, and 105,971 square miles hardwood or broad-leaved species.

In Canada as a whole about 10.5 p.c. of the total forest area has been permanently dedicated to forest production. The distribution of Dominion forest experimental areas, provincial forests, provincial parks and national parks, by provinces, is shown in the following statement.

FOREST RESERVES AND PARKS IN CANADA, 1938.

Province.	Dominion Forest Experimental Areas.	Provincial Forest Reserves.	Provincial Parks.	National Parks.	Total.
	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.
Prince Edward Island.....	Nil	Nil	Nil	7.60	7.60
Nova Scotia.....	Nil	Nil	Nil	458.00	458.00
New Brunswick.....	35.00	Nil	Nil	Nil	35.00
Quebec.....	7.25	31,319.60	5,099.00	Nil	36,425.85
Ontario.....	97.10	19,606.00	4,248.00	11.70	23,962.80
Manitoba.....	35.95	3,775.14	Nil	1,148.04	4,959.13
Saskatchewan.....	Nil	10,042.93 ¹	258.38	1,869.00	12,170.31
Alberta.....	62.60	14,347.09	2.27	7,316.00 ²	21,727.96
British Columbia.....	Nil	24,803.00	2,727.47	1,715.00	29,245.47
Totals.....	237.90	103,893.76	12,335.12	12,525.34	128,992.12

¹ Of this area 236.39 square miles have been placed under provincial park regulations. ² Not including the Wood Buffalo Park, partly in Alberta and partly in the Northwest Territories, and the Tar Sands Reserve.

Of the total forest area, 8.5 p.c. has been permanently alienated, being owned in fee simple by private individuals or corporations. The Crown still holds title to 12.9 p.c. of the area, but has alienated the right to cut timber thereon under lease or licence. So far 78.6 p.c. has not been alienated in any way. It may be said that 91.5 p.c. of Canada's forest area is still owned by the Crown in the right either of the Dominion or the provinces and, subject only to certain temporary privileges granted to limit-holders, may at any time be placed under forest management and dedicated to forest production.

Volume of Standing Timber.—In 1935, the total stand of timber in Canada was estimated to be approximately 273,656 million cubic feet, of which 222,076 million cubic feet was of coniferous species and 51,580 million cubic feet of broad-leaved species.

During the ten years 1926-35, the average annual depletion due to use was approximately 2,034 million cubic feet of conifers and 547 million cubic feet of hardwoods. The average annual loss from fire was estimated at 241 million cubic feet of conifers and 26 million cubic feet of hardwoods. The loss from attacks of insects and fungi can only be estimated in a broad way, but it is placed at 700 million cubic feet annually for the ten-year period. In Nova Scotia, in 1931, the balsam suffered severely from "gout" induced, it is believed, by minute sucking insects of the genus *Dreyfusia*, previously undescribed. In the Gaspé peninsula the spruce saw-fly has become a serious menace, spreading to New Brunswick and as far west as Ontario. The total annual depletion during the ten-year period was, therefore, estimated to have been about 3,558 million cubic feet. To what extent this loss has been replaced by growth increment is not known but, considering the preponderance of the younger age classes in the reproduction, it is believed there has been a considerable net depletion in the merchantable age classes.

Another real difficulty is the division of the existing stand into merchantable timber and that which is inaccessible or unprofitable, since merchantability depends not only on the location but on the density of the stand, the demands of the market for certain species or qualities of product, and the regulations as to cutting. Light stands covering large areas may in the aggregate carry very large amounts of timber and still not be exploitable at a profit. For some species, such as aspen and white birch, which comprise three-quarters of the hardwoods, there is very little demand, and therefore these cannot properly be classed as merchantable, though accessible as far as location is concerned.

In June, 1929, a conference of the Dominion and provincial forest authorities was held in Ottawa and it was decided to undertake a national inventory of the forest resources of Canada, each authority conducting the necessary stock-taking surveys on the land under its jurisdiction. In connection with the inventory, data are being secured regarding the depletion due to use, fire, insect damage, etc., and the increment accruing. The Forest Service of the Department of Mines and Resources acts as a clearing-house for the national inventory, and in addition to collecting and compiling the data furnished by the provincial authorities has conducted the inventorial work in the Prairie Provinces and the Maritime Provinces. The inventories for Manitoba and New Brunswick have been completed. The Dominion Service is also carrying on extensive surveys to determine the increment taking place in the forests and conducting more intensive silvicultural research at forest experiment stations located in New Brunswick, Quebec, Ontario, Manitoba, and Alberta.

Under present conditions it is estimated that 133,290 million cubic feet of conifers and 36,853 million cubic feet of hardwoods can be considered as accessible.

1.—Estimate of Total Accessible Stand of Timber in Canada, Classified by Type and Merchantable Size, by Provinces and Regions, with Estimate of Grand Total Stand, 1937.

Province and Region.	Conifers.			Broad-Leaved.			Totals.		
	Saw Material.	Small Material.	Total Equivalent in Standing Timber.	Saw Material.	Small Material.	Total Equivalent in Standing Timber.	Saw Material.	Small Material.	Total Equivalent in Standing Timber.
	million feet b.m.	'000 cords.	million cubic feet.	million feet b.m.	'000 cords.	million cubic feet.	million feet b.m.	'000 cords.	million cubic feet.
Accessible.									
Prince Edward Island..	100	700	104	20	100	14	120	800	118
Nova Scotia.....	4,854	23,182	3,775	1,170	5,805	808	6,024	28,987	4,553
New Brunswick.....	5,657	48,070	6,863	3,944	15,737	2,359	9,601	63,807	9,222
Quebec.....	52,175	277,300	43,871	8,565	88,750	10,307	60,740	366,050	54,177
Ontario.....	23,620	251,175	34,560	9,640	105,820	12,163	33,260	356,995	46,724
TOTALS, EASTERN PROVINCES.....	86,406	600,427	89,173	23,339	216,212	25,651	109,745	816,639	114,824
Manitoba.....	1,045	9,645	1,357	1,620	19,110	2,170	2,665	28,755	3,528
Saskatchewan.....	4,085	12,865	2,400	2,825	46,260	5,013	6,910	59,125	7,413
Alberta.....	7,000	74,400	10,238	2,080	36,000	3,876	9,080	110,400	14,113
TOTALS, PRAIRIE PROVINCES.....	12,130	96,910	13,995	6,525	101,370	11,059	18,655	198,280	25,054
British Columbia.....	116,508	91,470	30,123	405	790	143	116,913	92,260	30,266
Totals, Accessible.....	215,044	788,807	133,291	30,269	318,372	36,853	245,313	1,107,179	170,144
Totals, Inaccessible...	171,673	503,268	88,785	8,264	136,192	14,727	179,937	639,460	103,512
Grand Totals.....	386,717	1,292,075	222,076	38,533	454,564	51,580	425,250	1,746,639	273,656

Section 4.—Forest Administration.

Subsection 1.—Administration of Dominion and Provincial Timber-Lands.

In Canada the general policy of both the Dominion Government and the Provincial Governments has been to dispose of the timber by means of licences to cut, rather than to sell timber-land outright. Under this system the State retains the ownership of the land and control of the cutting operations. Revenue is derived in the form of stumpage bonuses (either in lump sums or in payments made as the timber is cut), annual ground rent, and royalty dues collected as and when the wood is removed. Both ground rent and royalty dues may be adjusted at the discretion of the Governments so that the public may share in any increase in stumpage values or reductions may be made in the rates if conditions demand them.

The Maritime Provinces did not adopt this policy to the same extent as did the rest of Canada. In Prince Edward Island practically all the forest land has been alienated and is in small holdings, chiefly farmers' woodlots. In Nova Scotia 87 p.c. of the forest land is privately owned; nearly half of this is in holdings exceeding 1,000 acres. In New Brunswick over 50 p.c. has been sold, and 20 p.c. is in holdings exceeding 1,000 acres. The percentage of privately-owned forest land in the other provinces exclusive of National Parks and Indian reserves is as follows: Quebec, 8 p.c.; Ontario, 3.3 p.c.; Manitoba, 9.1 p.c.; Saskatchewan, 7.6 p.c.; Alberta, 7.7 p.c.; and British Columbia, 8.4 p.c. In all cases timber-lands are now

administered by the provinces in which they lie. As new regions are explored their lands are examined and the agricultural land disposed of. Absolute forest land is usually set aside for timber production, and the policy of disposing of the title to lands fit only for the production of timber has been virtually abandoned in every province in Canada. The ownership of forests by towns and communities, so common in Europe, is now beginning in Canada. Efforts are being made, especially in Quebec and Ontario, to encourage the establishment and maintenance of forests on this basis.

The administration of forest lands under Dominion control and those under the control of each of the provinces is reviewed below.

Forest Lands Under Dominion Control.—The forests under Dominion control are administered by the Department of Mines and Resources. The National Parks Bureau has charge of the National Parks, the Lands Registry Office administers the timber in Yukon and the Northwest Territories, and the Indian Affairs Branch administers, in trust for the Indians, the timber within their reservations. The Dominion Forest Service has charge of the Forest Experiment Stations.

Forest Lands Under Provincial Control.—*Nova Scotia.*—In this province, 10,473 square miles, about 87 p.c. of the forest land, is privately owned. The Crown timber is administered by the Minister of Lands and Forests, with a Chief Forester in charge of protection, surveys, etc. Timber-cutting leases are granted by special agreements.

New Brunswick.—The Forest Service, under the Department of Lands and Mines, administers the forests in New Brunswick. At present timber-lands are disposed of as in the other provinces, but in the past several grants of forest land were made to railway companies, private concerns, and individuals, who now own in fee simple about 11,100 square miles of forest land.

Quebec.—The Forest Service of the Department of Lands and Forests administers the timber-lands in Quebec. Its powers include classification of land, disposal of timber and regulation of cutting operations. Since 1924 forest protection has been under a separate organization, the Forest Protective Service. Licences are granted after public competition and are renewable from year to year, subject to changes in royalty by the Government at any time. Grants of land in fee simple, made in some cases under the French *régime* in Quebec, are responsible for the private ownership of about 31,048 square miles of forest land. Forest reserves cover 31,320 square miles and provincial parks 5,099 square miles.

Ontario.—Forest administration is carried out in Ontario by the Department of Lands and Forests, under a Minister, Deputy Minister, and Provincial Forester.

In recent years the sale of saw timber has been by tender after examination, with conditions covering the removal within a specified period, disposal of debris, etc. Much of the merchantable timber is at present held under licences granted in the past and renewable indefinitely. Pulpwood areas are usually disposed of by individual agreements for longer periods than in the case of saw timber. The licensees usually undertake to erect a pulp-mill or a paper-mill within the province, the type and size of mill being stipulated in the agreement. In this province about 7,972 square miles of forest land have been disposed of outright. Provincial forest reserves cover 19,606 square miles, and the provincial parks 4,248 square miles.

Manitoba.—The Forest Service of the Department of Mines and Natural Resources has administered the forests of Manitoba since 1930. A provincial Air Service is operated under the direction of the Provincial Forester, and is mainly

used for purposes of forest fire protection. Six forest reserves, containing 3,775 square miles, are permanently reserved for the production of forest products. Timber is disposed of by licence or timber sale, and large numbers of timber permits, covering small quantities of wood, are issued annually to settlers and others. One pulp and paper mill is in operation in the province. The area of privately-owned forest land is estimated to be 8,500 square miles.

Saskatchewan.—The forests of Saskatchewan are administered by the Department of Natural Resources. The organization is unique in Canada, because the different resources are not controlled by different branches of the Department. Instead, each field officer handles matters pertaining to all resources within his district. Forestry affairs of the Department are controlled by the Director of Forests. Timber disposal is carried out under licence, sale, and permit. An Air Service is maintained, mainly for forest protection purposes. Forest reserves occupy 10,043 square miles and provincial parks 258 square miles. Privately-owned forest land is estimated to be 6,250 square miles.

Alberta.—The Forest Service of the Department of Lands and Mines administers and protects the provincial forests. Timber is disposed of through licences and permits except on forest reserves, where timber sales are disposed of but licensed berths are not. The area in forest reserves is 14,347 square miles, and 10,044 square miles of forest land are privately owned.

British Columbia.—In the province of British Columbia, the Forest Branch of the Department of Lands has administered timber-lands since 1912. All unalienated lands in the province which are found to be better suited to forest than to agricultural production are dedicated to the former purpose, and all timber-lands carrying over a specified quantity of timber are withdrawn from disposal until examined by the Forest Branch. During the past few years 24,803 square miles have been set aside permanently for forest purposes. Provincial parks include 2,727 square miles. The present practice is to sell cutting rights for a stated period by public competition but licences to cut, which are renewable annually in perpetuity, have been granted for a large proportion of the accessible timber. The royalties are adjusted periodically on the basis of prevailing industrial conditions. About 15,000 square miles of timber-land are privately owned.

Subsection 2.—Forest Fire Protection.

The protection of forests from fire is undoubtedly the most urgent and most important part of the work of the different agencies administering forest lands in Canada. Except for the forests of the National Parks, the Forest Experiment Stations, and the Northwest Territories and Yukon, which remain under Dominion control, the administration of forest lands now rests with the provinces. Up to the end of the fire season of 1930, the Forest Service of the former Dominion Department of the Interior was responsible for fire protection in the prairie provinces of Manitoba, Saskatchewan, and Alberta, and the Railway Belt of British Columbia. However, by reason of the transfer of natural resources from Dominion to provincial control, their administration is now a matter of provincial concern.

Each of the Provincial Governments, except that of Prince Edward Island, maintains a fire protection organization co-operating with owners and licensees for the protection of all timbered areas, the cost being in part distributed or covered by special taxes on timber-lands. In each province, with the exception just mentioned, provincial legislation regulates the use of fire for clearing and other legitimate

purposes, and provides for close seasons during dangerous periods. An interesting development in this connection in the province of Quebec is the organization of a number of co-operative protective associations among lessees of timber limits. These associations have their own staffs which co-operate with those of the Board of Railway Commissioners and the Provincial Government. The latter contributes money grants and also pays for the protection of vacant Crown lands lying within the area of the associations' activities.

In the matter of forest fire protection along railway lines, the provincial services are assisted by the Dominion Railway Act administered by the Board of Railway Commissioners. This Act gives to that body wide powers relating to fire protection along railway lines under its jurisdiction in Canada. Certain officers of the various forest authorities are appointed *ex officio* officers of the Board of Railway Commissioners. These officers co-operate with the railway fire-ranging staffs employed by the various railway companies, the compulsory control of all lines coming under the jurisdiction of the Board being one of the requirements of the Dominion Railway Act.

The most important single development of late years in forest fire protection has been the use of aircraft for the detection and suppression of incipient forest fires. Where lakes are numerous, flying boats can be used for detection and for the transportation of fire fighters and their equipment to fires in remote areas. Specially developed aircraft equipped with wireless are employed on forest fire-protection operations; these enable the observer to report the location of a fire as soon as it has been detected. Aircraft are now being used extensively for exploring remote areas and mapping forest lands by means of aerial photography. Waste lands and the various forest types can be mapped more accurately and more economically by this means than by ground surveys. As a general rule, aircraft are used in the more remote districts, while lookout towers, connected by telephone lines or equipped with wireless, are established in the more settled and more travelled forest areas. While these agencies have to a large extent supplanted the old canoe, horseback, and foot patrol for the detection of fires, a large ground staff with its equipment stored at strategic points will always be necessary for the fighting of larger fires. A ground staff is also necessary for the maintenance in the forest of fire lanes, fire guards, and systems of communication and transportation.

The most important improvement in forest fire-fighting equipment has been the portable gasoline pump. These pumps, each of which weighs from 45 to a little over 100 pounds, can be carried to a fire by canoe, motor boat, automobile, aircraft, pack-saddle or back-pack. They can deliver efficient water pressure as far as seven thousand feet from a water supply and, when used in relays, to a much greater distance. Small hand pumps supplied by 5-gallon portable containers are also used effectively in many cases.

In addition to these improved measures, the enactment of legislation has tended to reduce the fire menace. The establishment of close seasons for brush burning, and seasons during which permits are required for setting out fires and for travel in the forest during dangerous dry periods, have been of enormous value as preventive measures.

Since its beginning in 1900, the Canadian Forestry Association has played an important part in securing popular co-operation in reducing the fire hazard. By means of its magazine which has a circulation of over 16,000, by railway lecture cars and motor trucks provided with motion picture equipment, and by co-operation with radio broadcasting stations and the press, the Association reaches a large proportion of the population of the Dominion. Special efforts are made through the

schools, by specially appointed junior forest wardens and other means, to educate the younger generation as to the value of the forests, the devastation caused by fire and the means of preventing such destruction.

Prepared lectures illustrated by slides and films are distributed to volunteer lecturers and other educational work is carried on in schools and at public meetings. The various governmental forest authorities also carry on forest conservation publicity work independently and in co-operation with the Canadian Forestry Association.

Another important advance in forest protection is the development by the Dominion Forest Service of methods for the daily measurement of the actual degree of forest fire hazard which is expressed in the form of an index computed from the weather factors. In the forest types and regions in which the necessary research has been completed the forest authorities are able, not only to gauge the trend of increasing hazard at any given time, but, by the aid of weather forecasts, they can anticipate the trend one or two days in advance and so regulate their activities to meet hazardous conditions as they develop.

Subsection 3.—Scientific Forestry.

Up to the present, the practice of forestry in Canada has consisted chiefly in the administration and protection of existing forest areas. About 35 square miles is now being planted out annually, largely in connection with farmers' woodlots, shelter belts, and reclamation work, while several commercial reforestation projects have been carried on by paper companies and by Provincial Governments on denuded Crown lands. The great forestry problem in Canada, however, is the management of Crown forests, first under provisional and later more intensive working plans, so as to ensure a sustained yield. To this end, forest research activities are now assuming great importance. Silvicultural investigations are receiving marked attention both from the Dominion services and some of the provincial services.

About 400 technically-trained foresters are employed by the Dominion or provincial forest services or by paper and lumber companies. In addition to administrative work, these men carry on forest surveys either for the estimation of timber stands and making of maps, or to determine natural growth and reproduction conditions and factors. A considerable number of foresters are actively engaged in commercial logging operations.

Dominion Forest Service.—The activities of the Dominion Government in forest research are centred in the Dominion Forest Service, which is a bureau of the Lands, Parks, and Forests Branch of the Department of Mines and Resources. Until the time of transfer of the natural resources of the Prairie Provinces, and the Railway Belt and Peace River Block in British Columbia, to provincial control in 1930, the Forest Service was primarily concerned with the administration of forest reserves and the protection from fire of all forests on Crown lands. In addition silvicultural research work had been carried on at the Petawawa Experiment Station in the Ottawa valley since 1918. Since the transfer of the resources, the Service has been entirely devoted to investigations in the fields of forest economics, silvicultural research, forest protection research, and forest products research.

In co-operation with the provincial forest authorities, the Forest Service assembles the available information respecting the forest resources of the Dominion in order to prepare a national forest inventory. Such material is revised every five years and published in reports entitled "The Forests of Canada", which are submitted to the quinquennial British Empire Forestry Conferences. Besides

giving assistance to certain provinces in the preparation of their inventories, the Service is developing improved methods in interpreting the valuable forestry data contained in aerial photographs. The Economics Division also assembles data and issues reports on forest revenues and expenditures, the production of forest industries, the employment of labour, and trade in forest products.

Five forest experiment stations, where investigations of the underlying principles governing the growth of forests can be made, and where practical methods of management can be tested, are now in operation. Besides the original station at Petawawa, new establishments, opened since 1930, include the Acadia station near Fredericton, N.B.; the Valcartier station near Quebec; the Duck Mountain station in Manitoba; and the Kananaskis station in the foothills west of Calgary. The total area of the five stations is approximately 238 square miles. These stations, or experimental areas, are used for forest fire-hazard research as well as for silvicultural work, and also form centres from which investigations can be conducted in other areas in the regions in which they are located.

One of the principal problems now exercising the minds of all who are interested in the future welfare of our forest resources concerns the present condition and future prospects of forest areas which have been cut or burned. The Forest Service is conducting a special series of investigations into this question in co-operation with the provinces and timber owners.

Forest Products Laboratories.—In order to promote the more efficient use of the forest resources of Canada and at the same time assist the wood-using industries in the more technical problems encountered in their manufacturing operations, the Forest Products Laboratories of Canada were organized in 1913 under the Forest Service of the former Department of the Interior. The need for them was felt because of the influence of the establishment of such laboratories in other important timber-growing countries. Besides, on account of Canada's large exports of timber and timber products, it became increasingly apparent that, in order to meet world competition in the timber trade, it was necessary that Canada keep fully abreast of other countries in scientific developments in wood utilization.

For several years the Laboratories carried on all their work in Montreal, under an arrangement with McGill University. The subsequent development of their work has necessitated the establishment of a branch laboratory in Vancouver in a building provided by the University of British Columbia, the transfer of the main Laboratories to Ottawa, and the establishment of the Pulp and Paper Division of the Laboratories in Montreal in a building erected by the Canadian Pulp and Paper Association. In this building are also housed the executive offices of the Association and certain laboratories of McGill University devoted to research in cellulose and related products. The Pulp and Paper Association, in addition to providing accommodation for the Laboratories, makes a yearly grant to the Laboratories to assist in financing the work, and through a Joint Administrative Committee, consisting of representatives of the Government and the Association, takes an active part in formulating and forwarding the work of the Division. Close co-operation is also maintained with McGill University.

The main Laboratories in Ottawa carry out work in timber mechanics, wood fabrication, wood preservation, lumber seasoning, timber pathology, wood structure, wood identification, wood chemistry and general wood utilization; they also co-operate with other Government Departments and industrial organizations in timber marketing problems. In addition, the Ottawa Laboratories carry out many investigations in connection with logging problems of the pulp and paper industry.

The Vancouver Laboratory devotes attention to special problems relating to Pacific Coast timbers which require local treatment and which cannot be carried out to advantage in the main Laboratories on account of distance or for other reasons.

A research committee of the Canadian Lumbermen's Association was set up several years ago to effect liaison between the industry and the Laboratories and make as effective as possible the application of researches carried out by the Laboratories in the problems of the lumber industry.

Since the Laboratories were established, many advances have been made in the technique of wood utilization. Improvements have been made in treating railway ties, telephone poles, mining timbers, and other structural timbers with creosote, water-soluble salts, and other chemicals. This has enhanced the value of wood as a permanent structural material and permitted its use for a variety of purposes for which it is otherwise unsuitable. The work carried out in the treatment of hardwoods, especially birch, beech, and maple, has been of particular value. Reductions in the cost of manufacture of pulp and paper, and improvements in quality of products have resulted from researches of the Laboratories. Of particular interest has been the development in the Pulp and Paper Laboratory of the Canadian Standards Freeness Tester and the Johnston Fibre Classifier. Valuable work has also been carried out in the manufacture of groundwood pulp and in the pulping of resinous woods and hardwoods.

The study of the significance of discolouration in timber, as for example in jack pine, red cedar, and Douglas fir, has been responsible to a considerable degree in curtailing rejection of such material. Researches carried out in the spraying or dipping of timber, notably the sapwood of the pines, with chemicals which are toxic to wood-staining organisms have assisted in curtailing losses on this account, which in some years amounted to as high as one million dollars.

Through researches carried out in the Laboratories and at wood-working plants important advances have been made in seasoning both in the open air and in experimental dry-kilns. This work has been particularly valuable in both Eastern and Western Canada in connection with export markets which are becoming increasingly critical of specifications. The work carried out has been of significance to exporters of both softwoods and hardwoods.

Mechanical and physical tests have been carried out on nearly all important Canadian commercial species of timber according to practices which have been adopted by laboratories of countries of the British Empire and the United States. A great deal of work has also been carried out on large structural timbers. This information has been widely used by Canadian engineers and has formed the basis for the revision of city building codes. It has also been made the basis for Canadian standard grades for all species of Canadian woods of structural importance which have been set up by the Canadian Engineering Standards Association.

Close co-operation is maintained between the Laboratories and the Commercial Intelligence Service of the Department of Trade and Commerce through its Trade Commissioners. The Laboratories also co-operate closely with the Dominion Department of Public Works in all its timber structures and with other Dominion Departments, notably Agriculture, National Defence, and Transport; also with Canadian railway companies and other large public utility organizations.

Universities and Other Agencies.—Education in forestry and opportunities for research are offered by four Canadian universities. The University of Toronto, the University of New Brunswick, and the University of British Columbia provide four-year courses leading to a professional degree. The School of Forestry and

Surveying in connection with Laval University at Quebec provides, in the French language, a combined course of four years duration leading to diplomas in both sciences. The Government of Quebec has established a school in paper-making at Three Rivers in the heart of the paper industry; several agricultural colleges provide short courses in farm forestry and a school for forest rangers has been established at Duchesnay by the Quebec Forest Service.

A provincial forest experiment station of six square miles is maintained by the Quebec Forest Service at Duchesnay, near Quebec city, and the British Columbia Forest Branch has four such stations, totalling fourteen square miles and located at Aleza lake, Campbell river, Cowichan lake, and Green Timbers.

The practice of forestry by individuals and private concerns is encouraged by the furnishing of expert advice by Dominion and provincial services and by the distribution of tree-planting material. The Dominion Department of Agriculture maintains two nurseries in Saskatchewan, one at Indian Head and the other at Sutherland, near Saskatoon. Over 7,000,000 trees are distributed annually to farmers and ranchers in the Prairie Provinces for planting woodlots and windbreaks. If certain conditions are fulfilled, the material and instructions are provided free except for transportation charges. A total of over 125,000,000 trees has been distributed.

The province of Ontario provides material under similar conditions and distributes to woodlot owners at least 7,000,000 trees annually from its five nurseries. As many more are being provided for the creation of county forests, demonstration forests and plantations on denuded Crown lands. To encourage the establishment of communal forests by towns and other municipalities, the Provincial Government undertakes to plant, free of charge, any area purchased by the municipality for this purpose. The Government also assists counties that purchase areas of not less than 1,000 acres of land for forest purposes. As a result of these inducements there are at present, scattered throughout the province, 50 communal forests (owned by municipalities) and eight of the larger county forests. Farm land used for forestry purposes, while so used, is exempt from taxation up to 10 p.c. of the total farm area but not exceeding a total of 20 acres.

In Quebec, a forest nursery at Berthierville serves as a demonstration station for the School of Forestry. It provides trees for sale and distribution in the province, comprising seedlings and transplants for forest planting and larger trees for ornamental purposes. The capacity of the nursery is about 10,000,000 trees. Provision is made by legislation for the creation of communal forests and there are now 76 of these, covering 594,059 acres.

Section 5.—Forest Utilization.

A short historical sketch of forest utilization in Canada appears at p. 325 of the 1934-35 Year Book and an article on "The History of the Canadian Lumber Trade", by A. R. M. Lower, M.A., will be found at pp. 318-323 of the 1925 edition of the Canada Year Book.

Subsection 1.—Woods Operations.

Differences in forest conditions throughout Canada give rise to differences in logging methods. Generally speaking, throughout Eastern Canada the climate is such that the cutting and hauling of logs can be carried on most economically during the fall and winter months. The trees are felled and the logs hauled to the nearest stream or lake, where they are piled on the ice or sloping banks. The presence of

connected systems of lakes and streams makes it possible in most cases to float the logs from the forest to the mill at a minimum cost during the annual spring freshets. The logging industry east of the Rocky mountains is, therefore, almost entirely seasonal. In many cases lumbermen co-operate in river-driving operations and improvement companies, financed by the logging operators, build river improvements to facilitate the passage of the floating logs, the logs being finally sorted and delivered to their respective owners. In British Columbia the scarcity of drivable streams and the greater average size of the logs give rise to entirely different logging methods. Logs are assembled by cable systems operated by donkey engines and are transported to the mills or to water chiefly by logging railways but in some cases by motor trucks. These operations are more or less independent of frost, snow, or freshet and are carried on in most cases throughout the entire year.

In Eastern Canada logging operations are usually carried on by the mill owners or licensees of timbered lands, often through the medium of contractors, subcontractors and jobbers. In the better-settled parts of the country a considerable quantity of lumber is sawn by custom sawmills or small mills purchasing logs from the farmers. Unmanufactured pulpwood, poles, ties and other forest products have a market value, but sawlogs, being as a rule the property of the mill owner, are not generally marketed as such in Eastern Canada. In British Columbia logging is carried on more frequently as a separate enterprise by limit-holders, who cut and sell logs on the market. In many cases mill operators are not limit-holders but buy their entire supplies of raw material from logging concerns.

In connection with operations in the woods it should be borne in mind that the forests not only provide the raw material for the sawmills, pulp-mills, wood distillation, charcoal, excelsior, and other plants but that they also provide logs, pulpwood, and bolts for export in the unmanufactured state, and fuel, poles, railway ties, posts and fence rails, mining timber, piling, and other primary products, which are finished in the woods ready for use or exportation. There are also a number of minor forest products, such as Christmas trees, maple sugar and syrup, balsam gum, resin, cascara, moss, and tanbark, which all go to swell the total.

Table 2 gives the total values of the products of woods operations in Canada for the years 1931 to 1935, inclusive. The exports and imports of forest products in the fiscal years ended Mar. 31, 1934-37, are shown in Tables 12 and 13 of the chapter on External Trade.

2.—Values of Woods Operations, by Products, 1931-35.

Product.	1931.	1932.	1933.	1934.	1935.
	\$	\$	\$	\$	\$
Logs and bolts.....	32,889,204	18,029,759	23,158,381	29,115,515	34,077,938
Pulpwood.....	51,973,243	36,750,910	33,213,973	38,302,807	41,195,871
Firewood.....	44,237,948	30,627,632	31,141,104	31,489,524	31,864,500
Hewn railway ties.....	4,144,169	1,353,664	1,370,750	1,541,901	3,188,651
Poles.....	3,057,546	1,411,209	963,951	1,091,046	1,359,736
Round mining timber.....	958,681	809,700	841,982	954,059	997,357
Fence posts.....	1,388,074	990,568	969,291	988,884	976,402
Wood for distillation.....	266,080	251,281	342,107	286,847	274,797
Fence rails.....	454,205	253,077	215,521	262,519	266,253
Miscellaneous products.....	1,754,780	1,628,452	1,556,082	1,506,630	1,260,274
Totals.....	141,123,930	92,106,252	93,773,142	105,539,732	115,461,779

It has been estimated that operations in the woods in Canada in 1935 involved the investment of \$131,000,000 in logging equipment, gave employment for a part of the year equivalent to 79,000 man-years, and distributed over \$60,000,000 in wages

and salaries. In estimating the annual drain on our forest resources, certain converting factors have been used. Each of these factors represents in cubic feet the quantity of standing timber that must be cut in the forest to produce one unit of the material in question, based on the total cubic contents of the tree. By the use of these factors it has been estimated that the total drain on our forest resources in 1935, due to consumption for use, amounted to 2,440,809,000 cu. ft. of standing timber. To this total must be added the volume of material destroyed by fire, insects, and fungi, which would bring the average annual depletion to more than four billion cubic feet of standing timber. Table 3 gives the reported or estimated quantities of wood cut, by chief products, together with the respective converting factor, the equivalent in standing timber and the estimated value in each case for 1935, with totals 1924-35. Table 4 shows the extent of the drain on our forest resources in 1934 and 1935, by provinces.

3.—Quantities of Wood Cut in Operations in the Woods in Canada, Equivalents in Standing Timber, and Total Values, by Chief Products, 1935, with Comparative Totals, 1924-35.

Product.	Quantity Reported or Estimated.	Converting Factor.	Equivalent Volume in Standing Timber.	Total Value.
			'000 cu. ft.	\$
Totals, 1924.....	-	-	2,808,506	213,146,710
Totals, 1925.....	-	-	2,839,133	209,276,561
Totals, 1926.....	-	-	2,838,106	204,436,328
Totals, 1927.....	-	-	2,865,303	204,937,750
Totals, 1928.....	-	-	2,988,038	212,950,799
Totals, 1929.....	-	-	3,090,615	219,570,129
Totals, 1930.....	-	-	3,056,930	206,853,494
Totals, 1931.....	-	-	2,306,144	141,123,930
Totals, 1932.....	-	-	1,882,228	92,106,252
Totals, 1933.....	-	-	2,027,714	93,773,142
Totals, 1934.....	-	-	2,299,547	105,539,732
1935.				
Logs and bolts..... M ft. b.m.	3,349,102	219	733,453	34,077,938
Pulpwood..... cord	6,095,016	117	713,117	41,195,871
Firewood..... "	8,791,000	95	835,145	31,864,500
Hewn ties..... No.	5,857,187	12	70,286	3,188,651
Poles..... "	411,793	13	5,354	1,359,736
Round mining timber..... cu. ft.	5,422,041	1-3	7,050	997,357
Posts..... No.	14,234,363	2	28,467	976,402
Wood for distillation..... cord	48,772	123	5,999	274,797
Fence rails..... No.	4,895,286	3	14,687	266,253
Miscellaneous products..... cord	-	-	27,251	1,260,274
Totals, 1935.....	-	-	2,440,809	115,461,779

4.—Equivalent Volumes of Standing Timber Cut in Canada and Values of Products of Woods Operations, by Provinces, 1934 and 1935.

Province.	Equivalent Volumes in Standing Timber.		Totals, Value.	
	1934.	1935.	1934.	1935.
	'000 cu. ft.	'000 cu. ft.	\$	\$
Prince Edward Island.....	12,147	12,212	502,392	506,954
Nova Scotia.....	122,892	122,105	5,857,594	6,006,233
New Brunswick.....	152,063	159,319	8,155,613	8,543,401
Quebec.....	809,619	850,443	38,312,690	41,268,620
Ontario.....	466,780	514,481	24,726,574	27,996,771
Manitoba.....	59,029	63,089	1,891,440	2,089,487
Saskatchewan.....	77,864	79,216	2,001,815	2,119,402
Alberta.....	96,095	104,597	2,651,620	3,073,760
British Columbia.....	503,058	535,347	21,439,994	23,857,151
Totals.....	2,299,547	2,440,809	105,539,732	115,461,779

Subsection 2.—The Pulp and Paper Industry.

The manufacture of pulp and paper is a comparatively recent development in Canadian industry. Paper was first manufactured in Canada about a hundred years ago but prior to 1860 no wood-pulp was used or produced. Rags, straw, esparto grass, cotton waste, and other substances were the raw materials used. The first paper-mill was established at St. Andrews in Quebec (then Lower Canada) in 1803 by United States citizens who obtained concessions from the seigneurs. Upper Canada's first mill, which is still in operation, was built in 1813 at Crook's Hollow (now Greenville) near Hamilton, and the Maritime Provinces entered the industry in 1819 with a mill at Bedford Basin near Halifax.

In 1866, Alexander Buntin installed at Valleyfield, Quebec, what is claimed to have been the first wood grinder in America and began the manufacture of wood-pulp by the mechanical process. During the same year Angus Logan and Co. built the first chemical wood-pulp mill in Canada at Windsor Mills in Quebec. During the next decade the use of wood-pulp in paper making was extensively developed and in 1887 Charles Riordon installed the first sulphite mill in Canada at Merritton in the Niagara peninsula; by the beginning of the century the output of the industry had exceeded \$8,000,000. In 1907 the Brompton Pulp and Paper Co. built, at East Angus in Quebec, the first mill in America to manufacture chemical pulp by the sulphate or kraft process.

The gross output of the industry increased rapidly and steadily until the boom years following the Great War, when it jumped to a peak of over \$232,000,000 in 1920. This was followed by a drop in 1921, after which there was a steady recovery, resulting in a second peak in 1929 of \$243,970,761. This was followed by annual decreases down to 1933 and annual increases up to 1936.

The rapid development of this industry up to 1929 was due chiefly to the existence in Canada of abundant water powers adjacent to extensive forest resources of pulpwood species and an increasing demand for newsprint paper in the United States. Summary statistics for the combined pulp and paper industry are given on p. 304.

There are to-day three classes of mills in the industry. These, in 1936, numbered 25 mills making pulp only, 44 combined pulp and paper mills, and 24 mills making paper only.

The industry in Canada includes three forms of industrial activity, the operations in the woods with pulpwood as a product, the manufacture of pulp, and the manufacture of paper. These three stages cannot be treated as entirely distinct nor can they be separated from the different stages of the lumber industry. Some of the important pulp companies operate sawmills to utilize the larger timber on their limits to the best advantage, and many lumber manufacturers divert a proportion of their spruce and balsam logs to pulp-mills. So far as operations in the woods are concerned, it is often impossible to state whether the timber being cut will eventually be made into lumber or into pulpwood.

On account of legislation already referred to, pulpwood cut on Crown lands must, in every province, be manufactured into pulp in Canadian pulp mills except under special permit. The pulpwood which is exported to the United States is, therefore, largely cut from private lands. Table 5 shows the annual production of this commodity from 1926 to 1936, together with the quantities used by Canadian pulp-mills and the quantities exported and imported.

In 1908 almost two-thirds of the pulpwood cut in Canada was exported in the raw or unmanufactured form, but by 1916 the proportion had declined to two-fifths. Since 1930 the proportion exported has been less than one-fifth.

5.—Production, Consumption, Exports, and Imports of Pulpwood, calendar years 1926-36.

NOTE.—Figures for the years 1908-25, inclusive, will be found at p. 288 of the 1931 Year Book.

Year.	Apparent Total Production of Pulpwood in Canada.			Canadian Pulpwood Used in Canadian Pulp-Mills.		Canadian Pulpwood Exported Unmanufactured. ¹		Imported Pulpwood Used in Canada.	
	Quantity.	Total Value.	Average Value per cord.	Quantity.	Per cent of Total Production.	Quantity.	Per cent of Total Production.	Quantity.	Per cent of Total Production.
	^a cords.	\$	\$	cords.	p.c.	cords.	p.c.	cords.	p.c.
1926. . . .	5,621,305	68,100,303	12.11	4,229,567	75.2	1,391,738	24.8	2	2
1927. . . .	5,929,496	70,284,895	11.85	4,387,687	74.0	1,541,769	26.0	2	2
1928. . . .	6,295,912	74,587,843	11.85	4,763,646	75.7	1,532,266	24.3	32,674	0.7
1929. . . .	6,536,335	76,120,063	11.65	5,241,340	80.2	1,294,995	19.8	37,082	0.7
1930. . . .	5,977,183	67,529,622	11.30	4,646,717	77.7	1,330,466	22.3	94,632	1.6
1931. . . .	5,046,291	51,973,243	10.30	4,088,988	81.0	957,303	19.0	59,291	1.4
1932. . . .	4,222,224	36,750,910	8.70	3,602,100	85.3	620,124	14.7	45,654	1.1
1933. . . .	4,746,383	33,213,973	7.00	4,027,827	84.9	718,556	15.1	17,049	0.4
1934. . . .	5,773,970	38,302,807	6.63	4,752,685	82.3	1,021,285	17.7	13,919	0.2
1935. . . .	6,095,016	41,195,871	6.76	4,985,143	81.8	1,109,873	18.2	19,940	0.3
1936. . . .	7,002,057	48,680,200	6.95	5,766,303	82.3	1,235,754	17.6	9,591	0.1

¹ Exports of pulpwood in the calendar year 1937 were 1,542,553 cords.

² None reported.

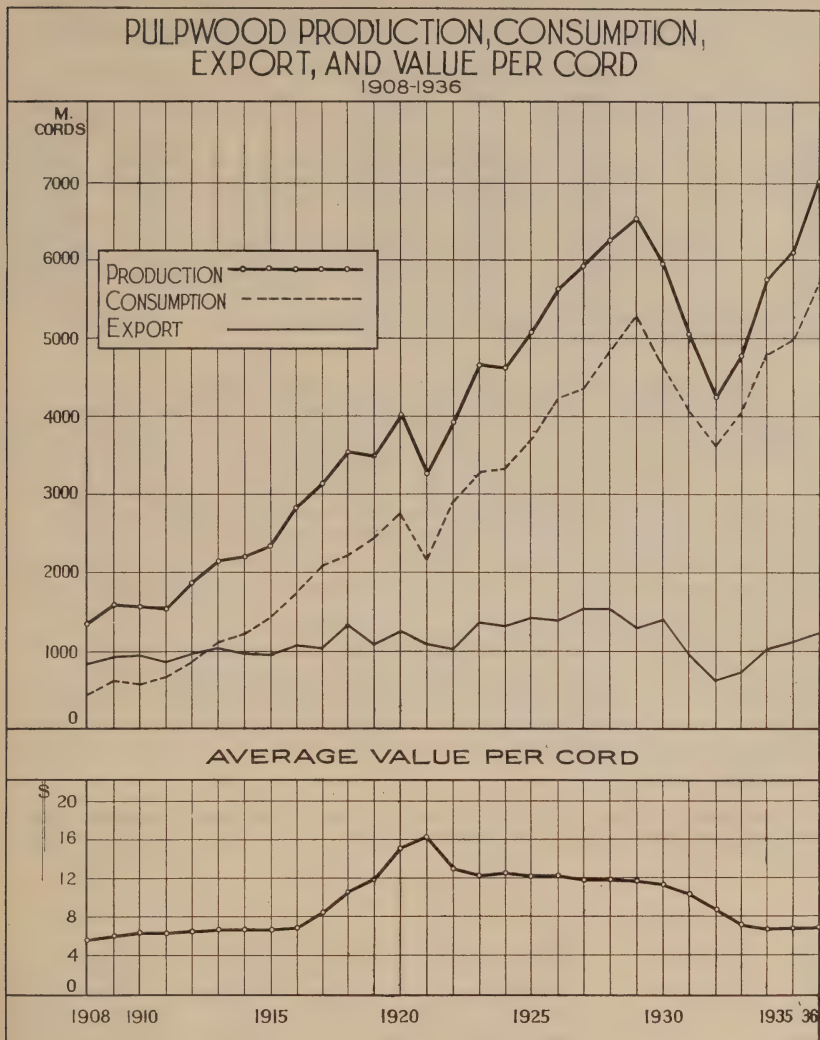
The manufacture of pulp is the second stage in this industry. This is carried on by mills producing pulp alone and also by paper manufacturers operating pulp-mills in conjunction with paper-mills to provide their own raw material. Such mills usually manufacture a surplus of pulp for sale in Canada or for export.

The supply of rags for paper-making is distinctly limited and the material too expensive for the manufacture of cheap paper. Early paper-makers experimented with fibres from the stems, leaves, and other parts of numerous annual plants, but the small proportion of paper-making material recoverable from such sources led to experiments in the use of wood. Different species were tried, and finally spruce and balsam fir were found to be the most suitable for the production of all but the best classes of paper.

The preliminary preparation of pulpwood is frequently carried on at the pulp-mill, but there are in Canada a number of "cutting-up" and "rossing" mills operating on an independent basis, chiefly for the purpose of saving freight on material cut at a distance from the mill or on material intended for exportation. Pulpwood is measured by the cord (4' by 4' by 8' of piled material), which is approximately equivalent to 500 feet board measure or to 90 cubic feet of solid wood.

There are, in Canada, four methods of preparing wood-pulp, one of which is mechanical and three chemical. Detailed descriptions of these processes were given in the 1931 Year Book, pp. 290-291.

Pulp Production.—Table 6 shows the total production of pulp in Canada from 1927 to 1936, inclusive, together with the production of groundwood pulp and the production of fibre by the chemical processes described.



The growth of this industry was steady up to 1920, when 1,960,102 tons of pulp were produced. There was a drop in production in 1921, but production in 1922 at 2,150,251 tons, more than overtook the previous year's drop. Following this, with the exception of 1924, each year up to 1929 showed consistent growth in the annual production, 1929 creating a record for the industry with a production of 4,021,229 tons. This was followed by annual decreases down to 1932 since when steady increases have been recorded resulting, in 1936, in a new record of 4,485,445 tons.

6.—Pulp Production, Mechanical and Chemical, calendar years 1927-36.

NOTE.—Figures for the years 1908-26, inclusive, will be found at p. 293 of the 1931 Year Book.

Year.	Total Production. ¹		Mechanical Pulp. ²		Chemical Fibre. ²	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	\$	tons.	\$	tons.	\$
1927.....	3,278,978	114,442,550	1,922,124	44,174,811	1,278,572	69,169,002
1928.....	3,608,045	121,184,214	2,127,699	47,549,324	1,392,755	72,500,188
1929.....	4,021,229	129,033,154	2,420,774	51,617,360	1,501,273	76,198,051
1930.....	3,619,345	112,355,872	2,283,130	48,317,494	1,265,057	63,156,351
1931.....	3,167,960	84,780,809	2,016,480	37,096,768	1,151,480	46,998,988
1932.....	2,663,248	64,412,453	1,696,021	28,018,451	967,227	35,987,294
1933.....	2,979,562	64,114,074	1,859,049	25,332,444	1,120,513	38,781,630
1934.....	3,636,335	75,726,958	2,394,765	30,875,323	1,241,570	44,851,635
1935.....	3,868,341	79,722,039	2,563,711 ³	32,323,820	1,283,743	46,444,144
1936.....	4,485,445	92,336,953	2,984,282	38,674,492	1,480,925	52,701,156

¹ Some of these totals include unspecified pulp.

² Including screenings.

³ Revised since the publication of the 1937 Year Book.

During 1936 there were 25 mills manufacturing pulp only and 44 combined pulp and paper mills. These 69 establishments turned out 4,485,445 tons of pulp, valued at \$92,336,953, as compared with 3,868,341 tons of pulp, valued at \$79,722,039 in 1935. Of the 1936 total for pulp, 3,558,545 tons, valued at \$55,713,784, were made in the combined pulp and paper mills for their own use in manufacturing paper. Of the remainder, 166,838 tons, valued at \$6,137,570, were made for sale in Canada, while 760,062 tons, valued at \$30,485,599, were made for export. As in the case of pulpwood, a part of the product at this stage of the industry provides raw material for the later stages, while the remainder has a definite market value as pulp.

Over 64 p.c. of the production in 1936 was groundwood pulp and 16 p.c. unbleached sulphite fibre, these two being the principal components of newsprint paper. Bleached sulphite, bleached and unbleached sulphate, and soda fibre made up the remainder, with groundwood and chemical screenings, for which a considerable market has developed in recent years in connection with the manufacture of rigid insulating boards. Table 7 shows the production of pulp by provinces in the latest eight years.

7.—Production of Wood-Pulp in Canada, by Chief Producing Provinces, 1929-36.

Year.	Quebec.		Ontario.		Canada. ¹	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	\$	tons.	\$	tons.	\$
1929.....	2,174,805	69,286,498	1,255,010	39,963,767	4,021,229	129,033,154
1930.....	1,833,000	58,703,067	1,043,559	31,463,873	3,619,345	112,355,872
1931.....	1,513,658	41,884,387	858,100	22,944,933	3,167,960	84,780,809
1932.....	1,240,442	31,124,954	786,405	18,735,105	2,663,248	64,412,453
1933.....	1,360,704	29,860,706	867,417	18,644,259	2,979,562	64,114,074
1934.....	1,813,096	36,837,402	999,935	21,000,769	3,636,335	75,726,958
1935.....	1,916,382	38,235,076	1,087,742	22,866,369	3,868,341	79,722,039
1936.....	2,236,376	44,071,292	1,257,060	27,005,484	4,485,445	92,336,953

¹ Includes production in British Columbia, Manitoba, New Brunswick, and Nova Scotia.

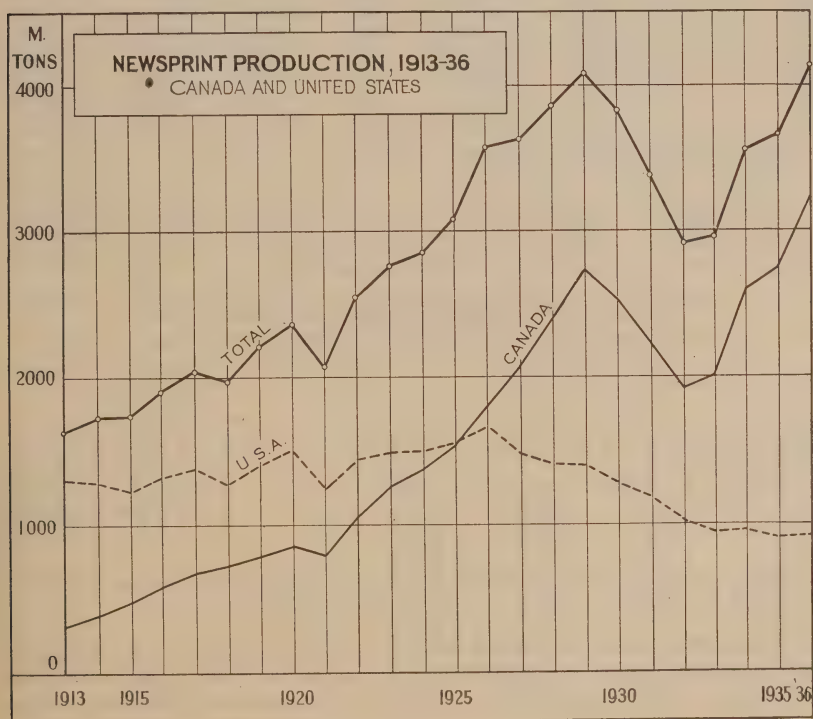
Pulp Exportation.—The following table gives the quantities of pulp exported by the principal pulp-producing countries of the world in 1936. Figures for 1913, the year immediately preceding the War, and for 1935 are shown for comparison. Figures of the exports of wood-pulp from Canada in the fiscal years ended Mar. 31, 1934-37, will be found in Table 12 of the chapter on External Trade. In the calendar year 1937 the exports of wood-pulp from Canada were 870,715 tons. The total exports of the eleven principal pulp-exporting countries of the world in 1936 were 6,837,884 short tons, of which Canada contributed about 11 p.c.

8.—Exports of Wood-Pulp from Principal Wood-Pulp Producing Countries of the World, calendar years 1913, 1935, and 1936.

Country.	Totals, Wood Pulp.			Proportions, 1936.	
	1913.	1935.	1936.	Chemical.	Mechanical.
	tons.	tons.	tons.	tons.	tons.
Sweden.....	1,112,313	2,676,608	2,847,885	2,207,356	640,529
Finland.....	132,674	1,783,824	1,497,123	1,191,124	305,999
Norway.....	779,025	837,295	971,615	364,415	607,200
Canada.....	298,169	662,474	754,496	607,605	146,891
Germany.....	206,042	327,661	259,998	256,957	3,041
United States.....	19,776	171,710	193,485	192,260	1,225
Austria.....	112,714	170,629	184,833	169,865	14,968
Czechoslovakia.....	23,935	100,811	120,933	120,849	84
Poland.....	Nil	3,988	4,060	4,060	Nil
Switzerland.....	7,328	2,916	3,456	2,782	674
Newfoundland.....	57,165	Nil	Nil	—	—
Totals.....	2,749,141	6,737,916	6,837,884	5,117,273	1,720,611

Paper Production.—The paper-making stage of the industry involves the consumption of wood-pulp and other paper stock in the manufacture of paper and other pulp products. Accurate annual statistics for this part of the industry are available only for 1917 to 1936. Figures for 1927-36 are given in Table 9.

During 1936 there were 44 combined pulp and paper mills and 24 mills making paper only. These 68 establishments produced 3,807,329 tons of paper, with a total value of \$147,854,652, as compared to 3,280,896 tons, valued at \$129,078,386 in 1935. Newsprint paper now forms nearly 85 p.c. of the annual paper production



in Canada. In 1936, the production was 3,225,386 tons, valued at \$105,214,533, a record production for volume although its value was lower than that of 1929, the record year for value. The preliminary estimate for 1937 is 3,645,309 tons, also a record for volume.

9.—Summary of Paper Production in Canada, calendar years 1927-36.

NOTE.—Comparable figures for the years 1917-26 will be found at p. 334 of the 1934-35 Year Book.

Year.	Newsprint Paper.		Book and Writing Paper.		Wrapping Paper.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	\$	tons.	\$	tons.	\$
1927.....	2,082,830	132,286,729	75,072	12,916,469	102,707	9,607,828
1928.....	2,414,393	144,146,632	79,138	14,008,406	111,667	10,424,217
1929.....	2,725,331	150,800,157	73,502	13,636,562	91,374	9,725,876
1930.....	2,497,952	136,181,883	69,468	12,261,659	78,320	7,880,224
1931.....	2,227,052	111,419,637	59,580	10,154,171	77,194	7,479,993
1932.....	1,919,205	85,539,852	56,781	8,687,895	69,018	6,289,293
1933.....	2,021,965	66,959,501	60,683	8,927,408	67,780	6,441,695
1934.....	2,604,973	86,811,460	64,991	9,681,536	79,779	7,740,823
1935.....	2,765,444	91,762,201	70,350	10,440,789	82,517	7,956,783
1936.....	3,225,386	105,214,533	74,940	10,866,346	98,545	8,876,496

Year.	Boards.		Tissue and Miscellaneous Paper.		Totals, Paper.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	\$	tons.	\$	tons.	\$
1927.....	161,497	8,985,788	46,585	4,433,926	2,468,691	168,445,548 ¹
1928.....	193,061	10,656,200	50,940	5,069,950	2,849,199	184,305,405
1929.....	250,061	13,539,645	56,881	5,287,012	3,197,149	192,989,252
1930.....	233,217	12,193,829	47,830	4,788,279	2,926,787	173,626,383 ¹
1931.....	202,854	10,225,732	44,545	4,350,356	2,611,225	143,957,264 ¹
1932.....	209,938	9,621,041	35,825	3,735,042	2,290,767	114,115,570 ¹
1933.....	232,190	10,598,439	36,802	3,762,832	2,419,420	96,689,875
1934.....	280,724	13,351,475	39,049	3,306,931	3,069,516	120,892,225
1935.....	314,849	15,051,893	47,736	3,866,720	3,280,896	129,078,386
1936.....	361,149	17,416,311	47,309	4,058,248	3,807,329	147,854,652 ¹

¹ Includes some unspecified paper products.

Newsprint made up about 85 p.c. of the total paper production in 1936, with about 9 p.c. of paper boards, 3 p.c. of wrapping paper, 2 p.c. of book and writing paper and about 1 p.c. of tissue and miscellaneous papers.

10.—Production of Paper in Canada, by Provinces, 1936.

Province.	Quantity.	Value.
	tons.	\$
Quebec.....	1,960,905	73,921,371
Ontario.....	1,161,303	48,492,032
British Columbia.....	320,555	11,807,830
Nova Scotia and New Brunswick.....	364,566	13,633,419
Totals.....	3,807,329	147,854,652

Quebec produced 51 p.c. of the total quantity, Ontario 31 p.c., British Columbia 8 p.c., and Nova Scotia and New Brunswick the remaining 10 p.c.

World Production of Newsprint.—The world production of newsprint in 1936 has been estimated at 8,217,000 short tons, of which North America supplied almost 50 p.c. and Canada alone over 39 p.c. The estimated production in the

leading 24 countries, compared with 1935, and the ten-year averages 1927-36 were as follows:—

11.—Estimated Quantities of Newsprint Produced in Leading Countries, 1935 and 1936, and the Ten-Year Averages, 1927-36.

NOTE.—Countries in order of importance according to the 1936 production.

Country.	Production—		Ten-Year Average.	Country.	Production—		Ten-Year Average.
	1935.	1936.			1935.	1936.	
	'000 short tons.	'000 short tons.	'000 short tons.		'000 short tons.	'000 short tons.	'000 short tons.
Canada	2,753¹	3,192¹	2,440	Austria.....	50	57	56
Great Britain.....	970	1,004	776	Belgium.....	48	53	48
United States.....	912	921	1,148	Czechoslovakia....	41	46	43
Germany.....	464	525	522	Switzerland.....	45	44	44
Finland.....	329	402	268	Poland.....	34	32	26
Japan.....	368	384	301	Spain.....	42	18	41
France.....	358	331	260	Chile.....	6	7	2
Newfoundland.....	336	328	280	Latvia.....	6	7	5
Sweden.....	298	282	263	Estonia.....	4	7	14
Russia.....	193	217	112	Mexico.....	20	Nil	15
Norway.....	182	200	179	Denmark.....	1	Nil	9
Netherlands.....	92	91	84				
Italy.....	76	69	64	Totals	7,628	8,217	7,000

¹ A slight difference in classification accounts for the difference between these figures and those shown in Table 9.

Exportation of Newsprint Paper.—In the fiscal year 1908, exports of printing paper were for the first time separately recorded, and valued at \$2,833,535. In the fiscal year 1913, when quantities were first shown, Canada exported 146,792 short tons valued at \$5,692,126. For the fiscal year ended Mar. 31, 1937, our exports of newsprint amounted to 3,144,985 tons valued at \$110,176,448 and ranked second only to wheat among the exports of the Dominion. For exports of newsprint and other paper in the fiscal years ended Mar. 31, 1934-37, see Table 12 of the chapter on External Trade.

As early as 1913 Canada led the world in the exportation of newsprint, and since that date her exports have increased more than nine-fold in quantity. The following table shows the exportation of newsprint from the 12 principal exporting countries in 1913, 1934, 1935, and 1936. Canada contributed to the total over twice as much as the other 11 countries combined in 1936. Canada's exports of newsprint paper for the calendar year 1937 were 3,455,240 tons.

12.—Exports of Newsprint Paper from Principal Paper-Producing Countries of the World, 1913, 1934, 1935, and 1936.

NOTE.—Countries arranged in order of importance of exports, 1936.

Country.	Years ended Dec. 31—			
	1913.	1934.	1935.	1936.
	short tons.	short tons.	short tons.	short tons.
Canada	256,661	2,414,274	2,574,987	2,993,089
Finland.....	77,213	286,993	309,066	377,032
Newfoundland.....	49,755	258,902	276,036	312,879
Sweden.....	67,938	209,990	228,422	198,503
Germany.....	75,761	72,510	129,107	183,921
Norway.....	108,507	141,708	164,196	170,556
United Kingdom.....	105,153	66,406	78,935	86,182
Austria.....	14,855	45,125	44,708	41,769
Japan.....	3,270	38,370	40,932	40,203
United States.....	43,301	23,427	22,523	14,573
Netherlands.....	—	13,240	11,002	10,093
Czechoslovakia.....	—	5,190	3,752	8,663
Totals	802,414	3,576,135	3,883,666	4,437,463

Statistics of the Combined Pulp and Paper Industries.*—The manufacture of pulp, the manufacture of paper and the manufacture of products made of paper may, under certain conditions, be treated as three industries as they are frequently carried on in separate plants by entirely independent companies. For some time, however, it has been the practice of many Canadian concerns to combine the manufacture of pulp and paper in one complete establishment. In more recent years there has been a further tendency to combine in one plant the manufacture of basic stock and the converting of this paper into towels, stationery and other highly processed paper products. In some cases, what might otherwise be considered as three distinct industries, are carried on in one plant as three steps in the production of the finished paper article. This further converting of paper within the pulp and paper industry itself represents only a small part of Canada's production of converted paper and boards, the bulk of which is still made in special converting mills classified in other industrial groups.

The presence of these different combinations in one mill makes it impossible to separate many of the statistics relating to the manufacture of pulp, basic paper, and converted paper products. Including manufacturing operations as far as the paper-making stage, there were altogether 93 mills in operation in 1936. The capital invested amounted to \$539,350,001, the employees numbered 30,054 and their salaries and wages amounted to \$40,063,852. If we disregard the pulp made for their own use in combined pulp and paper mills and the basic paper made for their own use in combined paper and paper-converting mills, we can consider the total of materials and supplies used in the industry as a whole as amounting to \$72,202,983 in 1936 and \$57,995,037 in 1935 and the gross value of production as \$188,144,603 in 1936 as compared to \$162,651,282 in 1935. The net† value of production amounted to \$87,150,666 in 1936 and to \$81,973,352 in 1935.

The pulp and paper industry, one of the leading single manufacturing industries in Canada, has been first in wages and salaries paid since 1922, when it first exceeded the sawmills. It was the leading industry in gross value of production from 1925, when it replaced the flour-mills, until 1935 when it was overtaken by non-ferrous smelting and refining. It has been second to central electric stations in net value of production and capital for some years. Only the manufacturing stages of the industry are considered in these comparisons, no allowance being made for capital invested, men employed, wages paid or primary products sold in connection with the woods operations. These form an important part of the industry as a whole but cannot be separated from woods operations carried on in connection with sawmills and other industries. If the \$8,276,423 worth of exported pulpwood be taken into consideration, the gross total contribution of the pulp and paper industry toward Canada's excess of exports over imports in 1936 amounted to \$143,008,660, representing the difference between exports and imports of pulpwood, pulp, paper, and paper products.

The United States market absorbs annually all but a very small part of Canada's pulpwood exports, about 85 p.c. of her pulp and 77 p.c. of her paper shipments. About half of the paper consumed in the United States is either of Canadian manufacture or is made from wood or wood-pulp imported from Canada.

* See Chapter XIV—Manufactures—for further particulars regarding the pulp and paper and paper-converting industry.

† This is the net value of production as calculated for years since 1934. It is obtained by deducting cost of power, fuel, and consumable supplies, as well as cost of materials, from gross value of production.

Subsection 3.—The Lumber Industry.

The manufacture of lumber, lath, shingles, and other products of the sawmill is the second most important industry in Canada depending on the forest for its raw materials. Annual statistics covering this and other forest industries were collected and published by the Forest Service of the former Department of the Interior from 1908 to 1916, since when the work has been carried on by the Dominion Bureau of Statistics, in co-operation with the Forest Service.

The production of sawn lumber in Canada in 1920 reached a total of over four billion feet board measure, the highest cut recorded since 1912. Production in 1921 decreased by over a third and the average value by over \$10 a thousand feet. This was followed, with one exception, by annual increases up to 1929 and then by annual decreases down to 1932. There were increases in 1933, 1934, 1935 and 1936. British Columbia now produces 59 p.c. of the total. Table 13 gives the production of lumber, lath, and shingles in each year from 1926 to 1936.

13.—Quantities and Values of Lumber, Shingles and Lath Produced in Canada, calendar years 1926-36.

NOTE.—Figures for the years 1908-25, inclusive, will be found at p. 300 of the 1931 Year Book.

Year.	Lumber Cut.		Shingles Cut.		Lath Cut.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	M ft. b.m.	\$	M	\$	M	\$
1926.....	4,185,140	101,071,260	3,299,397	10,521,723	1,378,366	6,527,060
1927.....	4,098,081	97,508,786	2,837,281	8,716,085	1,322,665	5,603,396
1928.....	4,337,253	103,590,035	2,865,994	10,321,341	1,138,417	4,802,616
1929.....	4,741,941	113,349,886	2,707,235	9,423,363	835,799	3,860,799
1930.....	3,989,421	87,710,957	1,914,836	5,388,837	398,254	1,154,593
1931.....	2,497,553	45,977,843	1,453,277	3,331,229	228,050	576,080
1932.....	1,809,884	26,881,924	1,802,008	3,556,823	208,321	474,889
1933.....	1,957,989	27,708,908	1,939,519	4,448,876	151,653	332,364
1934.....	2,578,411	40,509,600	2,408,616	4,422,578	177,988	412,844
1935.....	2,973,169	47,911,256	3,258,253	7,593,765	226,854	536,087
1936.....	3,412,151	61,965,540	3,019,030	6,754,788	286,323	874,231

The total number of sawmills, tie, shingle, lath, veneer, stave, heading and hoop mills, and mills for the cutting-up and barking or rossing of pulpwood reporting in 1936 was 3,638, as compared with 3,698 in 1935. The capital invested in these mills in 1936 was \$78,294,341, employment amounted to 28,786 man-years and wages and salaries amounted to \$21,357,038. The logs, bolts, and other materials of the industry were valued at \$44,360,624 and the gross value of production was \$80,343,291. The net production in 1936 was \$35,982,667.

The production of sawn lumber increased in quantity from 1935 to 1936 by 14.8 p.c. Lath production increased by 26.2 p.c., and shingle production decreased by 7.3 p.c. Quantity decreases were also reported in sawn ties, box shooks, veneer, heading, and a few of the minor products. Total values increased with all but shingles, ties, shooks, staves, and heading. The total gross value of production increased from \$65,905,132 in 1935 to \$80,343,291 in 1936.

**14.—Quantities and Values of Lumber and All Sawmill Products Made in Canada,
by Provinces, 1935 and 1936.**

Province.	Lumber Production.				Totals, Value. ¹	
	Quantities.		Values.		1935.	1936.
	1935.	1936.	1935.	1936.		
	M ft. b.m.	M ft. b.m.	\$	\$	\$	\$
P. E. Island.....	6,226	5,347	105,184	88,904	129,800	118,138
Nova Scotia.....	140,236	118,402	1,865,612	1,704,920	2,276,841	2,049,412
New Brunswick.....	230,751	213,564	3,794,122	3,906,448	4,453,221	4,720,350
Quebec.....	453,956	467,670	7,423,881	8,859,771	9,860,342	11,871,123
Ontario.....	351,085	411,526	8,283,292	10,289,514	10,696,071	13,068,688
Manitoba.....	67,877	56,975	913,667	976,408	951,851	1,049,480
Saskatchewan.....	34,621	28,290	555,386	489,524	625,177	515,224
Alberta.....	78,070	86,669	975,055	1,216,215	1,198,640	1,404,446
British Columbia.....	1,610,347	2,023,708	23,995,057	34,433,836	35,713,189	45,546,430
Totals.....	2,973,169	3,412,151	47,911,256	61,965,540	65,905,132	80,343,291

¹ Includes all other sawmill products.

British Columbia came first in total production, contributing 59.3 p.c. of the total cut in lumber and 82 p.c. of the shingles in 1936. Quebec followed in second place, Ontario was third and New Brunswick fourth. Douglas fir was the most important kind of lumber sawn, and is produced almost entirely in British Columbia. Spruce is sawn in every province and comes second, with hemlock, white pine, cedar, and balsam fir next in order of importance. Cedar is the most important shingle wood sawn. The conifers usually form about 95 p.c. of the total cut of all kinds of wood in this industry, only 5 p.c. being deciduous-leaved trees or hardwoods.

Lumber Exportation.—The square-timber trade reached its maximum development in the '60's; thereafter it declined gradually and has now almost entirely disappeared. Simultaneously with its decline came the increased exportation of deals and other sawn lumber, first to Great Britain and later to the United States. Our trade with the latter country has been from the first largely confined to planks, boards, and dimension stock. During the American Civil War our exports of forest products of all kinds to the United States for the first time exceeded those to Great Britain, but in late years this has become the rule. The total quantity of sawn lumber and square timber exported from Canada changed little from 1900 to 1929, averaging about two billion ft. b.m. per annum, but decreased considerably in the next three years reaching its lowest level in 1932. This was followed by substantial increases in 1933 and 1934, a decrease in 1935 and increases in 1936 and 1937 to 1,857,964 and 1,966,298 M ft. b.m., respectively. Of the 1937 exports 54 p.c. went to the United Kingdom and 12 p.c. to other Empire countries making 66 p.c. to the Empire as a whole. Twenty-seven p.c. went to the United States and 7 p.c. to other foreign countries making 34 p.c. to all foreign countries. The exports of lumber and square timber increased in 1937, but the exports of shingles and lath decreased in quantity, though increasing slightly in value.

**15.—Canadian Exports of Planks, Boards, and Square Timber, by Countries,
calendar years 1934-37.**

Country.	1934.		1935.		1936.		1937.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	M ft. b.m.	\$	M ft. b.m.	\$	M ft. b.m.	\$	M ft. b.m.	\$
British—								
United Kingdom.	861,193	16,266,405	734,272	14,099,559	957,948	19,750,191	1,057,249	24,303,521
Irish Free State.	25,187	465,804	4,965	88,485	4,139	79,625	8,844	189,818
New Zealand.	2,999	78,771	3,867	96,576	6,364	176,720	5,871	186,227
Australia.	123,905	1,598,933	135,544	1,781,639	117,069	1,542,487	164,296	2,897,141
British South Africa.	20,160	355,931	18,816	350,751	42,282	853,171	27,516	723,456
British West Indies	17,156	332,513	11,071	221,155	15,747	327,730	17,834	463,734
Other British countries.	9,544	249,047	17,536	327,107	21,839	454,858	25,159	695,724
Totals, British....	1,060,144	19,347,404	926,071	16,965,272	1,165,388	23,184,782	1,306,769	29,459,621
Foreign—								
United States.	233,714	5,853,265	351,113	8,279,291	530,866	12,841,995	538,921	15,521,442
China.	103,522	1,209,749	74,649	941,704	88,968	1,155,008	39,256	674,941
Japan.	71,810	985,085	49,952	654,132	30,155	509,105	33,316	623,651
Other foreign countries.	21,936	446,764	28,763	673,575	42,587	978,315	48,036	1,309,439
Totals, Foreign....	430,982	8,494,863	504,477	10,548,702	692,576	15,484,423	659,529	18,129,473
Grand Totals....	1,491,126	27,842,267	1,430,548	27,513,974	1,857,964	38,669,205	1,966,298	47,589,094

Subsection 4.—Manufactures of Wood and Paper.

Sawmills and pulp-mills draw their raw material directly from the forest in the form of logs and pulpwood, and produce sawn lumber, other sawmill products, and pulp and paper. There are also a number of important industries which use these products as raw material for further manufacture. Some of them produce commodities made almost entirely of wood, wood-pulp or paper, others manufacture articles in which wood is the most important component, and others produce articles in which wood is necessary but forms only a small proportion of the value. There are, in addition, a number of industries which use wood indirectly in the manufacture of articles which do not contain wood as a component part. The first class includes the manufacture of paper, sash, doors, and other millwork, and planing-mill products; boxes, baskets, cooperage and other containers; canoes, boats, and small vessels; kitchen, bakers' and dairy woodenware; wooden pumps, piping, tanks, and silos; spools, handles, dowels, and turnery. The second class includes the manufacture of furniture, vehicles and vehicle supplies, coffins and caskets, etc., and the use of paper in printing and the manufacture of paper boxes, bags, stationery, and paper goods. The third class, where wood has a secondary importance, includes the manufacture of agricultural implements, railway rolling-stock, musical instruments, brooms and brushes, etc. The fourth class can be said to include practically every form of industrial activity, as few, if any, of these are entirely independent of the use of wood, directly or indirectly.

A classification based on the chief component material in the products of each manufacturing establishment is now largely used in compiling manufacturing statistics and for external trade purposes. Under this system most of the forest industries fall in the wood and paper group. In 1936 the gross value of production for all classes of manufactured products amounted to \$3,002,403,814 of which total the wood and paper group contributed \$497,103,666 or over 16 p.c. It was exceeded in this respect only by the vegetable products group with over 19 p.c. Of the ten groups of the industrial census the wood and paper group, which includes the manufacture of lumber, pulp and paper as well as the wood- and paper-using industries, was highest in number of establishments with 8,175, in net value of products with \$261,020,034,* and in salary and wage distribution with \$141,301,340.

*See footnote (†) p. 304.

In few industries did manufacture add, in 1936, a higher percentage to the material used than in the wood- and paper-using industries; in the manufacture of pulp and paper this percentage was 121 and in the lumber industry 81. In the manufacture of planing-mill products this percentage was 86 p.c. For the wood and paper group as a whole the value added by manufacture in 1936 was \$261,020,034,* or 111 p.c. of the value of materials used. Further details are given in Chapter XIV—Manufactures—of the present volume.

The forests of Canada contribute substantially to her export trade values. During the fiscal year ended Mar. 31, 1937, exports of wood and paper products amounted to \$223,918,476 and made up 21.1 p.c. of the total value of exports for the period, amounting to \$1,061,181,906. Exports of wood and paper products were exceeded by those of mineral products, which made up 29.1 p.c. of the total, and agricultural and vegetable products with 45.3 p.c. Wood and paper products are prominent among the individual items of exportation. Newsprint paper is second only to wheat on the list, with planks and boards fifth and wood-pulp eighth. The gross contribution of wood and paper products toward a favourable trade balance for Canada amounted to \$195,271,604 during the same period.

Subsection 5.—Forest Depletion and Increment.

Fire Losses.—No accurate summing up of forest fire losses in Canada's forests has ever been made, but it has been estimated that more than 60 p.c. of the original forest has been burned, about 14 p.c. has been cut for use and about 25 p.c. remains. Though the loss of merchantable timber has been greatly reduced in recent years by forest protective services and the education of the public, it still constitutes a serious drain on our resources.

Since the historic Miramichi fire, which burned along the valley of the Miramichi river in New Brunswick in 1825, there have been a number of disastrous fires. About the year 1845 vast areas west of lake Superior were burned over. Some years later a very extensive fire burned along the height of land from lake Timiskaming to Michipicoten. In 1871 a fierce fire swept over more than 2,000 square miles of forest from lake Nipissing westward along the north shore of Georgian bay. About the same time the greater part of the Saguenay and Lake St. John district, in Quebec, was swept by one of the most destructive fires on record. During a period of dry years from 1883 to 1893, a series of disastrous fires destroyed immense areas of timber in eastern and northern Manitoba and in northern Saskatchewan. Two other fires in 1891 and 1896 devastated more than 2,000 square miles of country in the southern Algoma district; in Quebec, country along the line of the Quebec and Lake St. John Railway also suffered by a number of disastrous forest fires about this time.

During more recent times a series of disastrous fires swept over northern Ontario. A number of isolated fires around the mining camp of Porcupine culminated, on July 11, 1911, in a conflagration which resulted in the loss of 72 lives and property damage estimated at \$3,000,000. In 1916 fires in the same general region were responsible for the deaths of at least 224 people. In 1922 a third fire destroyed the town of Haileybury and other centres. In 1908 a fire originating in the forest around Fernie, B.C., destroyed that city. Every year thousands of acres are devastated by fires of less individual importance, which in the aggregate are rapidly depleting our forest resources. In 1923 there were unusually disastrous fires, chiefly in Eastern Canada. A total area of over 6,000,000 acres was burned over with a loss of approximately \$46,000,000. The average area burned over for the ten-year

* See footnote (f) p. 304.

period from 1926 to 1935 was slightly over 2,000,000 acres with an average annual total loss and damage of \$4,500,000.

Speaking generally, there are, annually, two periods in Canada when the forest fire hazard is highest—in the spring, after the disappearance of the snow, when the forest floor is dry and the green underbrush has not yet developed, and again in the fall when the herbaceous growth is dead and the ground covered with dry leaves.

Statistics compiled by the Dominion Forest Service from reports received from the various provincial and private forest protective organizations show that, during the ten-year period from 1926 to 1935, 86 p.c. of all fires reported were due to human agencies and were, therefore, preventable. The remainder were attributed to lightning or other natural causes. Campers, settlers, smokers, and railways are responsible for most of the fires whose origin is determined. Other causes, including lumbering operations, lightning and incendiarism, account for smaller proportions.

Losses through Insects and Fungi.—From 1912 to 1923 the spruce bud-worm caused tremendous damage to the spruce and balsam-fir forests in Eastern Canada. In Quebec it was estimated that 100,000,000 cords of pulpwood were destroyed by this insect, and in New Brunswick the loss was placed at 15,000,000 cords. In these regions the active state of the infestation is now practically over, but the insect is causing damage in northern Ontario and Cape Breton island. Other insects, though not as destructive as this one, entail a heavy drain on the forest. The hemlock looper and a new species closely related to the spruce bud-worm are causing considerable damage in eastern coniferous forests. During recent years dusting by aeroplane has been developed on a practical basis by the Entomological Branch of the Department of Agriculture and promises to be effective in the control of certain defoliating insects under certain conditions. Perhaps the most effective means of controlling destructive forest insects is by the introduction of parasites. The Entomological Branch of the Dominion Department of Agriculture has developed this means of attack with marked success in the case of the larch saw-fly and has recently secured from Europe some millions of parasitic insects which are being liberated in the forests infested with the spruce saw-fly. The loss caused by the various forms of rot and other fungous diseases is probably not less than that caused by insects under normal conditions. The butt rot is especially prevalent in balsam fir, and the value of the hardwoods is also greatly decreased by rot.

Summary of Losses and Increment.—During the ten years 1926 to 1935 the average annual consumption of standing timber for use amounted to about 2,581,000,000 cubic feet. During the latest ten years, fire has destroyed annually about 267,000,000 cubic feet of merchantable timber and the young growth of various ages on 848,379 acres. The destruction occasioned by insects, fungi, and windfall is not known, but is estimated at 700,000,000 cubic feet per annum. It may be safely estimated that the forests of Canada are being depleted at the rate of about 3,550,000,000 cubic feet per annum. With about 600,000 square miles of accessible timber in a growing condition, an average annual increment of 10 cubic feet per acre would be quite possible under forest management and would cover this depletion. In view of the destruction of young growth which occurs and the deterioration of the forests and the soil, caused by repeated fires, there is little hope that this increment is being produced in merchantable timber at the present time throughout Canada, although particular areas are producing greatly in excess of this quantity. Nevertheless, extensive reproduction and rate-of-growth surveys being conducted by the Dominion Forest Service indicate that the increment is greater than previously estimated.

CHAPTER X.—FUR RESOURCES AND FUR PRODUCTION.

This chapter is divided into three sections dealing, respectively, with: the fur trade, using that term in the sense which historical association has given it in Canada; fur farming, which follows closely the treatment formerly given the subject in the chapter on agriculture; and fur production and trade statistics, covering the total production and external trade in raw furs.

Section 1.—The Fur Trade.

Historical Sketch.—The place which the fur trade held during the French *régime* in Canada, when for a century and a half it was at once the mainspring of discovery and development and the curse of settled industry, is familiar history. Later, the Hudson's Bay Company may be said with truth to have held the West until the Dominion had grown to absorb it, bequeathing, to the civilization which followed, a native race accustomed to the white man and an example of organization and discipline that was of lasting value. The salient facts in the story are given in the Canada Year Book, 1934-35, pp. 343-344.

Fur Resources.—In the early years of the 19th century, the exports of furs from Canada exceeded in value those of any other product. Conditions have greatly changed, but the total output has not seriously declined and Canada may still be regarded as possessing, in her northern regions, one of the great fur preserves of the world. The rapid development of the country and the opening up of the West during the later 19th and earlier 20th centuries, together with improvements in transportation and settlement, meant the exhaustion of the fur resources of the settled parts. The trade, therefore, gradually retreated to less accessible territory. More recently the development of mining on a large scale over the Precambrian Shield has forced the trapper still farther north. Decline in fur resources has, however, been accompanied by increase in demand and higher prices, the encouragement of fur farming, and the introduction of conservation measures. Nevertheless, the belt of northern Canada, which includes the whole of the Northwest Territories, the northern parts of the Prairie Provinces, and extends through northern Ontario and Quebec and into the Maritimes, remains one of the few natural reservoirs for fine furs and the fur resource of this vast area constitutes one of its major assets to-day; in fact, minerals and furs will probably remain the chief resources since much of the area is unsuited to settlement or forest growth.

The fur bearers of Canada are mostly carnivorous animals, but two very valuable rodents are included, *viz.*, beaver and muskrat. The largest fur-bearing animal is the bear—polar, along the Arctic coast and Hudson bay; grizzly, in the Rocky mountains; and black, common in wooded areas generally. Wolves are common and wide-spread—grey, black, and blue are colour varieties of the same species. Fox pelts account for more than half of the fur trade. Fur farms now supply nearly all of the silver fox pelts, while the Arctic regions provide a great number of white skins and a few blue ones. The ermine, or weasel, is fairly plentiful throughout the Dominion and is found as far north as trappers are operating. Otter, beaver, marten, fisher, and mink are furs of exceptional quality and beauty and are secured throughout the whole of the timbered parts of the northern belt. The mink is now being raised extensively on fur farms and the pelt of the ranch-bred mink is regarded as superior to that of the mink taken in the wilds.

Among the rodents, the beaver has the most valuable fur, but this animal has begun to show signs of decreasing and restrictions on the taking of beaver have been made more rigid in consequence. Muskrat is now quite highly prized and, so far as number of pelts taken is concerned, is far in advance of any other species; under the trade name of "Hudson seal", its pelt has become a favourite moderate-priced fur.

Conservation.*—The conservation of the fur bearers of Canada is a matter coming under the jurisdiction of the respective Provincial and Territorial Governments. Nevertheless, the Dominion as a whole is concerned in the conservation of fur and of all wild-life resources. It was to co-ordinate the wild-life conservation efforts of the various Dominion Departments that the Advisory Board on Wild Life Protection was organized in 1916. The Board is specially authorized to advise with respect to the administration of the Migratory Birds Convention Act and the Northwest Game Act, but has dealt with many other problems of wild-life conservation. Through conferences of provincial and Dominion officials which were convened for many years by the former Department of the Interior, but are now arranged by the Department of Mines and Resources, uniform and concerted action has been taken and the conservation of Canada's wild-life resources has been advanced. The general policy followed with regard to the fur-bearing animals has been mainly along two lines: first, to so regulate the taking of animals by limitation of catch or close season as to prevent their extinction in districts where natural conditions provide a suitable habitat; and second, to provide sanctuaries in strategic places which serve as reservoirs from which large areas of surrounding wild country may be naturally restocked.

Many of our most valuable fur-bearing animals are subject to marked fluctuations in numbers. The periods of abundance and of scarcity recur in sufficient regularity to be called cycles and they have an important bearing upon the fur trade generally and more particularly upon the well-being of a large percentage of our Indian and Eskimo population who depend upon the wild life for their livelihood. The Department of Mines and Resources, with the assistance of the Bureau of Animal Population, Oxford University, and the Hudson's Bay Company, has commenced an inquiry in the form of an annual questionnaire distributed to a number of Arctic stations with the object of endeavouring to determine the facts about each of these recurring fluctuations. It is necessary to continue this investigation from year to year because the situation is changing continuously, and it is hoped that the work will produce data from which a forecast can be made relating to the expected abundance of each important species. The study might also be suggestive of measures to prevent unnecessary depletion of any species of wild life during the periods of scarcity.

Information on the wild-life conservation activities of the provinces and territories may be secured from the chief game officials listed below: Roy A. Gibson, Deputy Commissioner, Northwest Territories, Ottawa (administers Northwest Game Act); G. A. Jeckell, Controller, Controller's Office, Dawson, Yukon; F. R. Butler, Inspector, Office of the Game Commission, 411 Dunsmuir St., Vancouver, British Columbia; W. H. Wallace, Game Commissioner, Edmonton, Alberta; Edward S. Forsyth, Game Commissioner, Department of Natural Resources, Regina, Saskatchewan; A. G. Cunningham, Director, Game and Fisheries Branch, Department of Mines and Natural Resources, Winnipeg, Manitoba; D. J. Taylor,

* Prepared under the direction of F. H. H. Williamson, Controller, National Parks Bureau, Department of Mines and Resources, Ottawa, by Hoyes Lloyd, Superintendent of Wild Life Protection.

Deputy Minister of Game and Fisheries, Toronto, 2, Ontario; L. A. Richard, Deputy Minister of Mines, Game and Fisheries, Quebec, Quebec; Lt.-Col. H. H. Ritchie, Chief Game Warden, Department of Lands and Mines, Fredericton, New Brunswick; F. A. Harrison, Chief Clerk, Department of Lands and Forests, Halifax, Nova Scotia; W. R. Shaw, Deputy Minister and Live Stock Superintendent, Department of Agriculture, Charlottetown, Prince Edward Island.

Section 2.—Fur Farming.*

Fur farming is now recognized as an industry upon which the fur trade is becoming more and more dependent for its supplies of raw furs. In 1921 the value of pelts of ranch-bred animals accounted for only 3 p.c. of the total value of raw fur production, while in 1936 it had risen to approximately 40 p.c.

Origin of the Fur-Farming Industry.—A short account of the origin of the fur-farming industry in Canada was given on p. 249 of the 1929 edition of the Year Book, while a more detailed account of the earlier history of the industry was given in a publication of the Commission of Conservation, Ottawa, entitled "Fur Farming in Canada", by J. Walter Jones, B.A., B.S.A., the second edition of which was published in 1914.

Fur Farms of Canada.—The term "fur farm" includes farms devoted entirely to the raising of fur-bearing animals (principally silver foxes), together with parts of farms where the raising of fur-bearing animals is carried on as a branch of the operations. Although the silver fox is of chief importance, other kinds of fur-bearing wild animals are being raised successfully in captivity—mink, raccoon, skunk, marten, fisher, and fitch. The mink in particular thrives in captivity if it receives proper care, and the number of mink farms is accordingly increasing at a rapid rate. In 1936 the value of the silver foxes on the farms represented 85 p.c. of the total amount, and the value of the minks, 13 p.c., leaving 2 p.c. for all other kinds combined. In addition to the farms already mentioned, where animals are raised in rather confined quarters, many areas of marsh, stream, or lake are being operated as muskrat and beaver farms. In the case of these semi-aquatic animals, however, although the animals are usually kept within a carefully fenced area where they are given supplementary food and are protected from predatory enemies, they nevertheless live and breed under natural conditions.

For many years the fox-farming industry was expanding so rapidly, both in Canada and abroad, that the chief source of income of ranches was the sale of live animals for breeding purposes, while the production of pelts was a minor or incidental feature. Thus, in 1925, the value of live silver foxes sold was \$2,755,000, while that of silver fox pelts was only \$736,000. As the number of foxes on fur farms progressively increased, ranchers had to readjust their economy to declining values for both live animals and pelts. The industry appears to be gradually becoming stabilized on a pelt basis rather than on a live animal basis. In the latest year, 1936, the value of live silver foxes sold was only \$542,888, while that of silver fox pelts sold was \$4,950,290, and for all fur farms the sales of pelts represented 87 p.c. of the total revenue. Mink is forging ahead in importance both as to values of animals and pelts sold. For the latest two years shown the increases have been about 7 p.c. and 270 p.c., and 122 p.c. and 102 p.c., for animals and for pelts respectively, whereas over the same period the value of silver fox animals sold from farms has diminished appreciably and that of silver fox pelts has increased by only about 20 p.c. and 12 p.c.

* Revised by Miss F. A. Brown, Chief of the Fisheries, Fur, and Dairy Statistics Branch, Dominion Bureau of Statistics. This Branch publishes detailed annual reports on fur farms and on the production of raw furs.

Statistics of Fur Farms.—The earliest Dominion-wide statistics of fur farms were collected for the year 1919. Since then annual statistics have been obtained covering the chief phases of the industry. The statistics of 1919 recorded 429 fur farms with 8,326 fur-bearing animals. The wide growth of the industry since then is evident from the statistics of the tables which follow.

Table 1 shows the numbers of farms and capital investment in the industry by provinces.

1.—Numbers of Fur Farms, Values of Land and Buildings and Values of Fur-Bearing Animals, by Provinces, 1934-36.

Province.	Fur Farms.			Values of Land and Buildings.			Values of Fur-Bearing Animals.		
	1934.	1935.	1936.	1934.	1935.	1936.	1934.	1935.	1936.
	No.	No.	No.	\$	\$	\$	\$	\$	\$
P.E. Island.....	646	771	730	879,083	884,895	876,446	1,168,683	1,192,410	1,088,647
Nova Scotia.....	690	853	953	254,739	314,687	337,422	431,098	557,447	608,202
New Brunswick....	991	983	1,028	563,009	508,221	531,955	941,746	949,101	908,215
Quebec.....	2,279	2,408	2,571	1,035,942	1,173,107	1,226,657	1,627,874	1,910,659	1,910,821
Ontario.....	1,026	1,029	1,170	1,215,022	1,321,913	1,401,675	1,606,592	1,848,343	2,044,500
Manitoba.....	352	400	510	592,400	700,403	795,072	760,546	913,072	1,108,779
Saskatchewan.....	225	308	349	404,707	413,752	567,550	490,828	545,552	629,447
Alberta.....	510	463	514	852,449	905,913	972,632	1,077,110	1,085,050	1,164,737
British Columbia...	293	272	304	397,887	356,184	367,747	314,725	373,916	362,640
Yukon.....	7	8	7	14,550	11,750	17,350	8,365	6,275	11,825
Totals.....	7,019	7,495	8,141	6,209,788	6,590,825	7,094,506	8,427,567	9,381,825	9,837,813

Table 2 indicates that the numbers of silver foxes and mink, the two fur-bearing animals which have proved most readily adaptable to domestication, were higher in 1936 than in any previous year. The values of animals on fur farms, on the other hand, have been greatly affected by the decline in prices since 1929.

2.—Numbers of Fur-Bearing Animals on Fur Farms in Canada at Dec. 31, 1928-36.

Kind of Animal.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Silver fox.....	72,631	97,190	105,894	95,734	92,703	103,842	125,577	141,509	151,696
Patch or cross fox.....	1,853	2,563	3,335	3,369	2,978	2,574	2,472	1,931	1,723
Red fox.....	1,489	2,348	3,018	2,879	2,526	2,244	2,031	1,548	1,248
Blue fox.....	1,331	1,576	1,755	1,219	858	689	691	669	649
Silver-blue fox.....	6	Nil	Nil	12	5	2	Nil	Nil	Nil
White fox.....	1	4	64	65	39	11	5	Nil	4
Mink.....	5,028	10,436	20,726	21,062	17,212	18,640	25,435	31,946	44,631
Raccoon.....	1,852	2,870	3,395	3,600	3,057	2,522	1,867	1,334	930
Skunk.....	99	78	20	54	20	12	19	Nil	2
Marten.....	152	187	228	272	207	202	154	113	122
Fisher.....	136	184	195	244	200	183	164	163	126
Opossum.....	Nil	Nil	3	Nil	Nil	Nil	Nil	Nil	Nil
Coyote.....	30	73	135	72	44	34	22	18	27
Badger.....	113	726	559	307	119	63	45	22	27
Lynx.....	9	10	13	16	10	1	Nil	Nil	Nil
Otter.....	1	2	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Fitch.....	Nil	25	150	826	1,587	1,857	1,558	1,144	1,001
Ferret.....	Nil	5	1	Nil	3	4	1	6	Nil
Weasel.....	Nil	11	6	11	17	8	9	8	8
Nutria.....	Nil	Nil	10	27	56	64	46	72	62
Chinchilla rabbit.....	3,464	1,438	1,206	239	80	79	79	2	7
Rabbit, <i>n.e.s.</i>	1,733	428	475	207	285	291	118	57	40
Karakul sheep.....	94	96	193	140	108	107	111	102	102
Muskrat ¹	168,861	711,111	425,525	119,285	132,973	65,324	35,556	20,539	17,769
Beaver ¹	799	698	1,112	806	1,118	1,029	1,010	1,180	888
Totals.....	259,682	832,059	568,018	250,446	256,205	199,782	196,970	202,363	221,062

¹ Based on estimates furnished by the operators of the farms.

3.—Values of Fur-Bearing Animals on Fur Farms in Canada at Dec. 31, 1928-36.

Kind of Animal.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Silver fox.....	14,922,378	18,047,124	13,386,171	7,259,148	6,027,501	6,849,725	7,742,294	8,495,851	8,345,552
Patch or cross fox.....	167,222	233,220	270,257	150,597	112,548	99,570	81,292	65,684	61,784
Red fox.....	46,770	91,575	77,872	45,988	33,199	27,405	23,583	16,149	13,567
Blue fox.....	172,682	196,750	174,193	73,237	34,375	25,243	22,865	20,750	21,043
Silver-blue fox.....	1,520	Nil	Nil	650	200	100	Nil	Nil	Nil
White fox.....	150	400	1,700	2,410	1,310	920	800	Nil	120
Mink.....	328,998	765,333	1,286,737	642,045	328,534	349,411	451,499	695,492	1,313,613
Raccoon.....	59,672	80,801	72,242	48,640	32,033	22,996	15,844	10,658	7,889
Skunk.....	693	341	73	187	126	12	14	Nil	10
Marten.....	14,310	17,340	20,660	17,550	10,739	10,697	8,125	6,460	7,225
Fisher.....	24,325	28,585	29,810	29,170	16,995	17,190	14,745	16,425	13,885
Opossum.....	Nil	Nil	25	Nil	Nil	Nil	Nil	Nil	Nil
Coyote.....	480	850	1,592	836	302	356	138	132	280
Badger.....	4,445	23,350	18,812	7,125	2,601	1,357	1,040	434	810
Lynx.....	880	825	1,600	660	320	20	Nil	Nil	Nil
Otter.....	70	100	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Fitch.....	Nil	550	5,760	13,478	16,496	11,729	6,604	4,598	3,472
Ferret.....	Nil	25	5	Nil	15	12	2	30	Nil
Weasel.....	Nil	50	25	28	29	8	10	4	8
Nutria.....	Nil	Nil	700	1,880	2,245	2,460	945	1,065	1,320
Chinchilla rabbit.....	27,711	8,627	2,089	342	194	65	36	5	15
Rabbit, n.e.s.....	12,575	2,428	1,623	685	1,454	484	234	109	38
Karakul sheep.....	5,348	4,300	5,334	1,650	1,255	1,060	917	540	560
Muskrat ¹	562,749	1,725,391	755,800	152,889	93,473	56,088	31,625	20,852	23,194
Beaver ¹	48,475	75,070	84,667	48,042	38,818	32,659	24,955	26,587	23,428
Totals.....	16,401,453	21,303,035	16,197,747	8,497,237	6,754,762	7,509,567	8,427,567	9,381,825	9,837,813

¹ Based on estimates furnished by the operators of the farms.

The annual revenue of the fur farmer arises from two sources, the sale of animals and the sale of pelts. Table 4 shows the sales of animals by kinds in the years 1928 to 1936 and Table 5 the sales of pelts. During late years the sales of pelts have exceeded the sales of live animals, while in former years the reverse was the case.

4.—Values of Fur-Bearing Animals Sold from Fur Farms in Canada, 1928-36.

Kind of Animal.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Silver fox.....	3,552,874	3,856,158	1,405,202	358,394	193,043	301,612	488,847	562,480	542,888
Patch or cross fox.....	38,675	66,554	29,296	8,526	4,467	5,313	3,291	3,280	3,321
Red fox.....	12,159	22,178	10,900	5,788	2,657	2,744	2,729	2,110	1,293
Blue fox.....	28,530	45,035	24,895	8,270	1,355	502	825	335	1,110
Silver-blue fox.....	550	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
White fox.....	Nil	Nil	161	Nil	210	Nil	Nil	Nil	25
Mink.....	140,889	407,570	301,754	85,728	28,581	34,802	68,708	73,402	271,225
Raccoon.....	18,031	17,996	13,800	4,825	2,163	2,201	1,294	779	867
Skunk.....	Nil	80	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Marten.....	350	1,270	2,075	905	570	100	155	800	292
Fisher.....	2,375	4,825	4,399	7,495	2,090	1,200	1,825	3,255	5,930
Coyote.....	Nil	20	20	124	Nil	Nil	230	Nil	Nil
Badger.....	215	4,984	2,957	485	145	6	Nil	320	Nil
Lynx.....	Nil	Nil	Nil	Nil	20	Nil	Nil	Nil	Nil
Fitch.....	Nil	100	1,720	6,724	5,565	4,025	2,436	2,377	1,160
Ferret.....	Nil	75	Nil	Nil	Nil	Nil	6	Nil	Nil
Nutria.....	Nil	Nil	Nil	175	515	675	1,040	115	880
Chinchilla rabbit.....	18,355	2,469	170	58	438	Nil	Nil	Nil	4
Rabbit, n.e.s.....	7,861	1,071	677	172	642	439	120	4	Nil
Karakul sheep.....	150	200	1,500	70	275	300	212	160	Nil
Muskrat.....	16,206	44,308	28,394	3,881	457	83	8	15	590
Beaver.....	200	60	625	380	Nil	460	1,325	Nil	Nil
Totals.....	3,837,420	4,474,953	1,828,545	492,000	243,193	354,462	573,051	649,432	829,585

5.—Values of Pelts Sold from Fur Farms in Canada, 1928-36.

Kind of Animal.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Silver fox.....	2,278,611	2,195,253	2,921,885	2,835,470	2,821,593	3,441,020	3,690,431	4,437,301	4,950,290
Patch or cross fox	54,307	43,122	75,676	84,993	93,018	95,522	84,503	75,273	65,182
Red fox.....	21,774	18,585	21,549	20,445	21,924	23,652	17,788	14,301	12,734
Blue fox.....	13,516	19,144	25,318	12,758	9,032	9,325	12,250	9,179	11,071
White fox.....	Nil	Nil	25	792	135	65	50	75	80
Mink.....	8,916	12,471	34,538	99,033	87,604	127,241	145,680	323,263	652,424
Raccoon.....	1,502	3,027	2,618	4,445	5,096	4,738	5,248	4,410	3,519
Skunk.....	23	48	11	4	10	Nil	Nil	6	Nil
Marten.....	30	Nil	100	79	313	262	175	194	830
Fisher.....	112	320	405	145	1,120	1,576	963	626	1,512
Coyote.....	Nil	340	691	718	395	610	530	322	1,187
Badger.....	28	1,646	3,925	3,101	1,398	629	408	296	108
Lynx.....	45	Nil	100	Nil	Nil	66	Nil	Nil	Nil
Fitch.....	Nil	Nil	Nil	341	568	2,616	3,184	2,010	1,738
Weasel.....	Nil	Nil	7	Nil	34	30	23	25	20
Nutria.....	Nil	Nil	Nil	Nil	Nil	Nil	Nil	50	3
Chinchilla rabbit	526	806	45	65	8	Nil	Nil	Nil	Nil
Rabbit, n.e.s.....	246	263	22	Nil	Nil	29	Nil	Nil	Nil
Karakul sheep.....	Nil	Nil	Nil	Nil	246	139	638	338	538
Muskrat.....	9,365	9,335	9,205	8,945	3,723	4,710	4,034	3,213	6,438
Beaver.....	25	550	150	126	410	213	105	113	248
Totals.....	2,389,026	2,304,910	3,096,270	3,071,460	3,046,627	3,712,443	3,966,010	4,870,995	5,707,922

Section 3.—Statistics of Total Production and Trade in Furs.

Fur Production Statistics.*—Early records of raw fur production are confined to the decennial censuses, when account was taken of the number and value of pelts obtained by trappers. In 1920 the Dominion Bureau of Statistics commenced an annual survey of raw fur production, basing its statistics on information supplied by the licensed fur traders. This survey was continued for some years. More recently, annual statements, based on royalties, export tax, etc., have been made available by the provincial game departments, and these statements are now used in the preparation of the statistics issued annually by the Bureau. In the case of Prince Edward Island, which, until the present, has been unable to furnish such annual data, the Bureau has heretofore used the returns of fur farms to supply information concerning the pelts sold. This method has been unsatisfactory, as the returns of fur farms are made for the calendar year, whereas the fur production statistics cover the 12 months ending June 30. Again in Prince Edward Island, the Bureau's list of fur farms, although inclusive of all the larger fur farms, is probably incomplete with regard to properties where not more than one or two pairs of foxes are kept. A licence is not necessary to operate a fur farm in that province and consequently no list of licensees is available. For the latest year the Prince Edward Island Department of Agriculture has furnished a statement giving the value of silver fox pelts, the product of Prince Edward Island fur farms, exported from the province during the season 1935-36, and based on data collected from the various selling agencies. The number of skins has been estimated at 62,169, this estimate being obtained by taking an average value of \$34 per pelt. The increase in fur production (almost entirely silver fox pelts) for Prince Edward Island is due to the change in the source used for the information.

The chief markets for Canadian furs are London and New York; the trade tables for the 12 months ended June 30, 1936, show that of the total of \$16,159,275 worth of raw furs exported, the United Kingdom received \$9,321,147 and the United

*Revised by Miss F. A. Brown, Chief of the Fisheries, Fur, and Dairy Statistics Branch, Dominion Bureau of Statistics.

States, \$6,015,782. At the close of the Great War, Montreal took a position as an international fur market, holding the first Canadian fur auction sale in 1920. At the sales held in Montreal during the year 1936 the pelts sold numbered 868,164, while the value amounted to \$5,397,042. Fur auction sales are held also at Winnipeg, Edmonton, and Vancouver. An important industry in Canada is the manufacture of fur goods, such as coats, capes, scarves, muffs, etc. In 1935 the number of plants so engaged was 309, and the total value of output \$12,518,670. Then there is the fur-dressing and -dyeing industry whose 13 plants in 1935 treated fur skins to the number of 5,738,920. The chief kinds of furs, with regard to number treated, were rabbit (2,736,041) and muskrat (1,131,496).

6.—Summary of the Numbers and Values of Pelts of Fur-Bearing Animals Produced in Canada, years ended June 30, 1920-36.

Year ended June 30—	Pelts.	Value of Pelts.	Year ended June 30—	Pelts.	Value of Pelts.
	No.	\$		No.	\$
1920.....	3,600,004	21,387,005 ¹	1929.....	5,150,328	18,745,473
1921.....	2,936,407	10,151,594	1930.....	3,798,444	12,158,376
1922.....	4,366,790	17,438,867	1931.....	4,060,356	11,803,217
1923.....	4,963,996	16,761,567	1932.....	4,449,289	10,189,481
1924.....	4,207,593	15,643,817	1933.....	4,503,558	10,305,154
1925.....	3,820,326	15,441,564	1934.....	6,076,197	12,349,328
1926.....	3,686,148	15,072,244	1935.....	4,926,413	12,843,341
1927.....	4,289,233	18,864,126	1936.....	4,596,713	15,464,883
1928.....	3,601,153	18,758,177			

¹ Fur prices in this year were abnormally high. Any comparison of this figure with those of later years should take this into account.

Among the provinces, Ontario occupies first place in value of raw fur production, its output in 1935-36 being valued at \$2,649,647. The relation of the value of raw fur production in each province to the total for Canada in 1935-36 is shown by the following percentages: Ontario 17·1; Quebec 16·0; Prince Edward Island, 13·7; Alberta, 11·0; Manitoba, 8·3; British Columbia, 7·8; Northwest Territories, 7·7; Saskatchewan, 7·4; New Brunswick, 4·8; Nova Scotia, 4·4; and Yukon, 1·8. Details by provinces of the numbers of pelts produced in the two latest years are given in Table 7.

7.—Numbers and Values of Pelts of Fur-Bearing Animals Produced in Canada, by Provinces, years ended June 30, 1935 and 1936.

Province or Territory.	Numbers of Pelts.		Values of Pelts.	
	1934-35.	1935-36.	1934-35.	1935-36.
			\$	\$
Prince Edward Island.....	19,828 ¹	64,581 ¹	653,238 ¹	2,119,706 ¹
Nova Scotia.....	66,828	78,200	650,836	676,379
New Brunswick.....	55,184	53,802	765,169	740,789
Quebec.....	299,279	295,606	1,915,009	2,470,998
Ontario.....	686,342	599,710	2,218,514	2,649,647
Manitoba.....	490,295	379,191	1,185,205	1,291,854
Saskatchewan.....	1,004,122	1,401,809	1,263,056	1,152,373
Alberta.....	1,850,461	1,274,919	1,474,528	1,696,383
British Columbia.....	200,351	194,596	809,168	1,201,523
Northwest Territories.....	212,414	211,551	1,678,544	1,188,285
Yukon.....	41,309	42,768	230,074	276,946
Canada.....	4,926,413	4,596,713	12,843,341	15,464,883

¹ The large increase in Prince Edward Island in both the number and value of pelts produced from the year 1934-35 to 1935-36 is mainly due to a change of method explained on p. 315.

The chief item of production is silver fox, practically the whole supply of which may be credited to the fur farms. The number of silver fox pelts shown for the season is 185,259, and the value, \$6,108,194. Next in order of value is muskrat, with \$2,148,605, and third is mink, with \$1,701,577. Mink farming has advanced rapidly in recent years and the farms now supply about 20 p.c. of the total production of mink pelts.

Compared with the preceding season, increases in average prices are shown for all kinds excepting blue, red, and silver fox, and wolverine, for which lower prices are recorded. Among the principal kinds, silver fox dropped from \$36.06 to \$32.97, but muskrat advanced from 90 cents to \$1.32, and mink from \$8.41 to \$11.03.

The total number of pelts of all kinds produced during the season 1935-36 was 4,596,713, compared with 4,926,413 in the preceding season. The reduction was due, chiefly, to the smaller numbers of muskrat and squirrel pelts.

The following table gives details of raw fur production by kinds for 1935 and 1936.

8.—Kinds, Numbers, Total Values and Average Values of Pelts of Fur-Bearing Animals Taken in Canada, years ended June 30, 1935 and 1936.

Kind.	Numbers of Pelts.		Total Values of Pelts.		Average Values per Pelt.	
	1934-35.	1935-36.	1934-35.	1935-36.	1934-35.	1935-36.
			\$	\$	\$	\$
Badger.....	1,225	157	9,426	2,001	7.69	12.75
Bear, black and brown.....	1,123	1,025	1,845	1,716	1.64	1.67
Bear, grizzly.....	10	9	45	63	4.50	7.00
Bear, white.....	43	59	572	843	13.30	14.29
Beaver.....	50,175	44,600	412,862	451,070	8.23	10.11
Coyote or prairie wolf ¹	53,018	50,639	359,036	365,560	6.77	7.22
Ermine (weasel).....	577,688	661,573	276,502	403,300	0.48	0.61
Fisher or pekan.....	3,728	4,624	170,064	236,287	45.62	51.10
Fitch.....	2,510	2,417	2,931	3,232	1.17	1.34
Fox, cross.....	32,799	28,077	694,174	674,919	21.16	24.04
Fox, red.....	104,468	106,012	781,709	791,448	7.48	7.47
Fox, silver.....	120,465	185,259	4,343,823	6,108,194	36.06	32.97
Fox, blue.....	1,316	1,046	32,550	24,124	24.73	23.06
Fox, white.....	68,366	45,743	1,043,028	697,597	15.24	15.25
Fox, unspecified.....	1,163	960	8,508	7,828	-	-
Lynx.....	22,014	22,456	511,410	636,205	23.23	28.33
Marten or sable.....	22,906	24,586	318,463	537,199	13.90	21.85
Mink.....	183,305	154,279	1,540,684	1,701,577	8.41	11.03
Muskrat.....	1,983,747	1,630,231	1,784,252	2,148,605	0.90	1.32
Nutria.....	Nil	6	Nil	50	Nil	8.33
Otter.....	8,927	9,749	152,404	173,858	17.07	17.83
Rabbit.....	288,641	853,277	18,097	102,393	0.06	0.12
Raccoon.....	20,101	20,370	69,309	78,322	3.45	3.84
Skunk.....	131,940	105,547	87,154	84,054	0.66	0.80
Squirrel.....	1,231,290	629,580	109,757	89,744	0.09	0.14
Wild cat.....	2,218	1,884	7,759	11,273	3.50	5.95
Wolf ¹	12,007	11,654	102,918	129,782	8.57	11.14
Wolverine or carcajou.....	655	650	3,988	3,600	6.09	5.54
Domestic cat.....	565	244	71	39	0.13	0.16
Totals.....	4,926,413	4,596,713	12,843,341	15,464,883	-	-

¹ Coyote or prairie wolf pelts for Manitoba are included with wolf pelts.

External Trade in Furs.—The important external markets for Canadian furs are London and New York; the trade tables for the twelve months ended June 30, 1936, show that of the total of \$16,159,275 worth of raw furs exported, the United Kingdom took \$9,321,147 and the United States \$6,015,782. In 1667 exports of furs to France and the West Indies were valued at 550,000 francs. In 1850, the first year for which tables of the Customs Department are available, the value of raw furs exported was £19,395. The following table shows exports for recent years which are greatly in excess of the earlier values.

9.—Exports of Canadian Raw Furs by Leading Countries and Kinds of Fur, years ended June 30, 1932-36.

Country and Kind.	Years ended June 30—				
	1932.	1933.	1934.	1935.	1936.
COUNTRY.	\$	\$	\$	\$	\$
United Kingdom.....	6,316,529	7,122,874	8,723,485	9,755,922	9,321,147
United States.....	3,908,773	2,634,231	4,156,005	4,626,876	6,015,782
Other countries.....	1,269,784	1,372,947	1,065,331	841,544	822,346
Totals.....	11,495,086	11,180,052	13,944,821	15,224,342	16,159,275
KIND OF FUR.					
Beaver.....	1,094,413	871,710	709,960	748,521	615,738
Fox, black and silver.....	3,818,463	4,550,906	5,264,026	5,708,024	6,260,371
Fox, other.....	2,021,303	1,676,757	2,076,921	2,818,386	2,522,428
Lynx.....	174,276	177,059	255,002	456,469	690,239
Marten.....	370,722	282,868	295,002	302,516	439,125
Mink.....	1,144,828	1,314,047	2,144,121	1,878,666	2,202,695
Muskrat.....	1,136,155	987,189	1,235,333	1,622,787	1,403,397
Other kinds.....	1,734,926	1,319,516	1,964,456	1,688,973	2,025,282
Totals.....	11,495,086	11,180,052	13,944,821	15,224,342	16,159,275

10.—Imports of Raw Furs by Leading Countries Whence Imported and Kinds of Fur, years ended June 30, 1932-36.

Country and Kind.	Years ended June 30—				
	1932.	1933.	1934.	1935.	1936.
COUNTRY.	\$	\$	\$	\$	\$
United Kingdom.....	290,353	202,762	540,727	454,421	630,775
United States.....	2,190,309	2,078,078	2,842,870	1,719,154	3,101,902
Other countries.....	228,623	201,330	411,495	451,639	618,662
Totals.....	2,709,285	2,482,170	3,795,092	2,625,214	4,351,339
KIND OF FUR.					
Fox.....	184,504	218,075	275,823	176,474	350,216
Kolinsky.....	84,148	110,280	59,146	21,554	50,918
Mink.....	109,577	95,867	238,798	106,723	194,671
Muskrat.....	594,542	518,251	1,012,650	316,231	622,850
Persian lamb.....	283,067	155,168	319,593	284,898	604,366
Rabbit.....	215,621	240,691	280,826	422,673	662,434
Other kinds.....	1,237,826	1,143,838	1,608,256	1,296,661	1,865,884
Totals.....	2,709,285	2,482,170	3,795,092	2,625,214	4,351,339

Among living animals exported from Canada only two kinds of fur-bearing animals are separately classified by the Customs Department. These are foxes, separately recorded first in 1925, and mink, in 1931. Live foxes exported were valued at \$1,388,459 in the fiscal year ended Mar. 31, 1925, \$1,434,686 in 1926, when the highest value was recorded, and only \$25,335 in 1937. Live mink exported were valued at \$66,811 in 1931 and \$27,590 in 1937. Foxes have been separately classified among imports of living animals since the fiscal year ended Mar. 31, 1928, when those imported were valued at \$6,914 compared with \$250 in 1937.

CHAPTER XI.—THE FISHERIES.

Section 1.—The Early Fisheries.

Fishing is one of the earliest and most historic industries of Canada. Leaving aside inconclusive evidence in favour of authentic record, one must ascribe to Cabot the honour of having discovered, in 1497, the cod banks of Newfoundland, when he first sighted the mainland of North America. Fishing may well be regarded as the first industry to be systematically prosecuted by Europeans in what is to-day the Canadian domain. It has since yielded a perennial harvest to both Europe and America. According to the Census of 1931, of 3,927,591 persons in Canada gainfully occupied in that year, 34,340 were reported as occupied in the fishing industry, that is, in primary fishing operations exclusive of canning and curing.

A more detailed account of the history of the Atlantic fisheries was given on p. 348 of the 1934-35 Year Book.

Section 2.—The Canadian Fishing Grounds.

The fishing grounds of the Dominion are of exceptional national value inasmuch as two of the four great sea-fishing areas of the world border on Canada. They fall naturally into three divisions: Atlantic, inland, and Pacific fishing grounds. A detailed description of each division, of the fish caught, and of the methods of fishing, will be found at pp. 222-225 of the 1932 Year Book.

Section 3.—The Government and the Fisheries.*

Upon the organization of the Dominion Government at Confederation, the administration of the Canadian fisheries was placed under the Department of Marine and Fisheries. Early in 1930 a Department of Fisheries, in charge of its own Minister, was organized. This Department now administers all the tidal fisheries (except those of the mainland portion of Quebec, which, by agreement, are under provincial administration), the non-tidal fisheries of Nova Scotia, and the fisheries of Yukon and the Northwest Territories. The non-tidal fisheries of New Brunswick, Prince Edward Island, Ontario, the Prairie Provinces, and British Columbia, and both the tidal and non-tidal fisheries of Quebec (except the fisheries of the Magdalen islands) are administered by the respective provinces, although the Dominion Department does certain protective work in non-tidal waters of New Brunswick, Prince Edward Island, and British Columbia. The right of fisheries regulation for all the provinces, however, rests with the Dominion Government. [See the Fisheries Act (22-23 Geo. V, c. 42).] The expenditure of the Dominion on the fisheries in the fiscal year 1936-37, including civil government salaries, contingencies, etc., was \$2,036,891 and the revenue \$176,730.

Conservation.—River and lake fisheries certainly, and sea fisheries probably, if left to themselves, conform to the economic law of diminishing returns. The Canadian Government, accordingly, has had for a main object the prevention of depletion by the enforcement of close seasons, the forbidding of obstructions and pollutions and the regulation of nets, gear, and fishing operations generally. In addition, an extensive system of fish culture has been organized; the Dominion, in 1936, operated 23 main hatcheries, 8 subsidiary hatcheries, 2 rearing stations, 8 salmon retaining ponds, and several egg collecting stations at a cost of \$214,528,

* Revised under the direction of W. A. Found, Deputy Minister, Department of Fisheries, Ottawa.

and distributed 111,672,401 trout and salmon eggs, fry, and older fish. The young fish are distributed *gratis* if the waters in which they are to be placed are suitable and are open to public fishing. Investigations and experiments directed toward the culture of the oyster have been carried on since 1929 in Prince Edward Island, by the Dominion Department of Fisheries, and are now being extended to areas in Nova Scotia. In New Brunswick, the oyster areas are under the jurisdiction of the provincial authorities, but in a portion of Shediac bay the areas have been transferred to the Dominion Department of Fisheries by the Provincial Government in order that certain oyster investigations might be begun there.

Direct Assistance.—On the Atlantic coast where conditions attending fishing operations make such a service desirable, a system has been established of broadcasting radio reports as to weather probabilities, bait and ice supplies, and ice conditions. Further, under authority of the Fish Inspection Act (R.S.C., 1927, c. 72) systems of instruction in improved methods of fish-curing and barrel-making have been in operation for several years.

From a special appropriation made by Parliament for the fiscal year 1936-37, the sum of \$200,008 was expended by the Department of Fisheries, in co-operation with the provinces concerned, in aiding needy fishermen in Nova Scotia, New Brunswick, Prince Edward Island, and Quebec, to re-establish themselves. In each of these areas, the Provincial Government contributed to the fishermen's aid an amount equal to the sum provided by the Dominion authorities for assisting the fishermen of that province. In all, 6,649 loans, totalling \$249,054 were made to fishermen in the Maritime Provinces and 22 loans, averaging \$1,061, to fishermen's associations, while in Quebec 8,930 fishermen received grants totalling \$127,616.

Scientific Research.—Under the direction of the Biological Board of Canada or Fisheries Research Board, stations for the conduct of research into the numerous complex problems occurring in connection with the fisheries are established at Halifax, N.S., St. Andrews, N.B., Grande Rivière, Que., and Nanaimo and Prince Rupert, B.C. Another station, chiefly for oyster investigation work, is conducted by the Board at Ellerslie, P.E.I., and a sub-station for salmon investigations at Cultus Lake, B.C. A permanent staff of scientists is employed by the Board. The life-histories of edible fishes, the bacteriology of fresh and cured fish, improved methods of handling and preparing fish, and numerous other practical problems have been taken up and papers dealing with them issued by the Board. Instructional courses for fishermen are given at some of the stations and information brought out by the station research is made available without charge to interested branches of the fishing industry.

International Problems.—The chief international fisheries problem has been the question of the privileges of the United States in the Atlantic fisheries. Details of the history of this question for the past century and a half may be found at pp. 351-352 of the 1934-35 Year Book. Since 1933, under the former *modus vivendi* licence plan, which grew out of a treaty of 1888, which, however, was never ratified, United States vessels have again been permitted to enter Canadian ports to buy bait and all other supplies.

On the Great Lakes, also, the more important fishery problems, such as restocking and marketing, are necessarily international in character, and are complicated by the number of State governments interested. Much the same situation has developed in connection with the sockeye salmon fishery of the Pacific coast

where the sockeye of the Fraser river, British Columbia, are taken by the canners of Puget sound in quantities that largely exceed the catch of the Canadian canners. Different treaties to settle the matter were signed but none of them has so far been made effective.

Better results have been obtained in dealing with the international problem touching the halibut fishery of the Pacific which was settled by the treaty "For the Protection of the Pacific Halibut", signed by Canada and the United States on Mar. 2, 1923. Under this treaty a close season in each year was provided for halibut fishing. A further convention, signed by the plenipotentiaries of the two countries at Ottawa on May 9, 1930, and ratified by the respective Governments of the countries on May 9, 1931, provided for the regulation of the fishery by the division of the waters into fishing areas, changing of dates for close seasons, etc. This revised convention provides a simpler and more responsive system of control than was previously possible.*

Fishing Bounties.—By an Act of 1882 (45 Vict., c. 18) for the development of the sea fisheries and the encouragement of boat-building, provision was made for the distribution, annually, among fishermen and the owners of fishing boats and vessels on the Atlantic waters, of \$150,000 in bounties, representing the interest on the amount of the Halifax Award. An Act of 1891 (54-55 Vict., c. 42) increased the amount to \$160,000, the details of the expenditure to be settled each year by Order in Council. For the year 1936, payment was made under authority of the Deep Sea Fisheries Act (R.S.C., 1927, c. 74) on the following basis: to owners of vessels entitled to receive bounty, \$1 per registered ton, payment to the owner of any one vessel not to exceed \$80; to vessel fishermen entitled to receive bounty, \$6.60 each; to owners of boats measuring not less than 12 feet keel, \$1 per boat; to boat fishermen entitled to receive bounty, \$5.70 each. The total amount paid in 1936 was \$159,977. Details of the distribution of bounties for the years 1933 to 1936 are as follows:—

1.—Government Bounties Paid to Fishermen for the calendar years 1933-36.

Province.	Numbers of Men who Received Bounties.				Amounts of Bounties Paid. ¹			
	1933.	1934.	1935.	1936.	1933.	1934.	1935.	1936.
					\$	\$	\$	\$
Prince Edward Island.....	1,984	2,058	2,129	2,129	11,518	12,028	12,815	13,495
Nova Scotia.....	11,386	11,770	11,093	11,022	72,920	76,538	74,843	77,349
New Brunswick.....	3,462	3,420	3,248	2,710	24,455	24,683	23,174	20,508
Quebec.....	8,715	8,008	8,135	7,714	50,415	46,727	49,133	48,625
Totals.....	25,547	25,256	24,605	23,575	159,308	159,976	159,965	159,977

¹ Amounts include payments to vessel and boat owners.

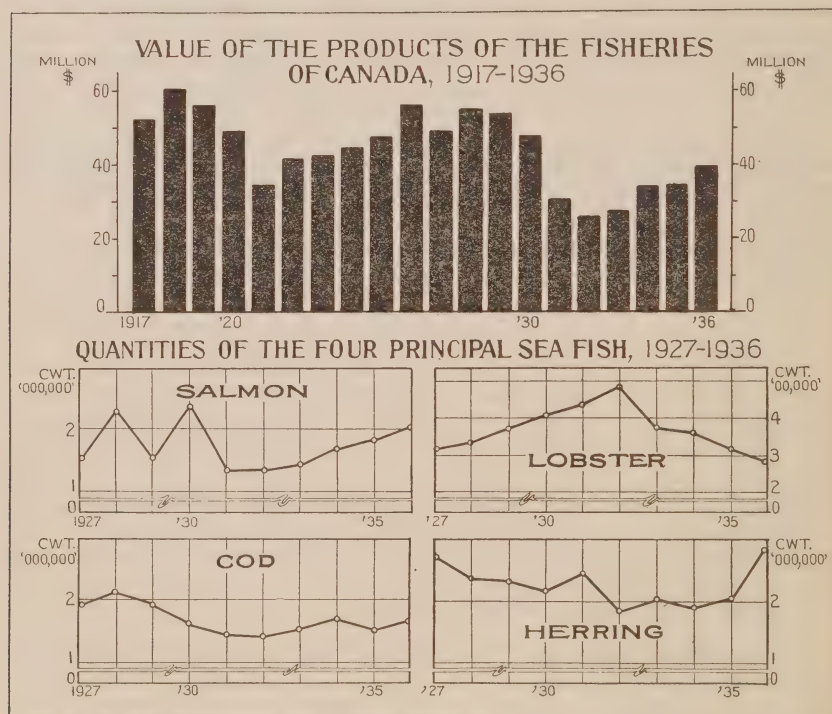
Collection of Statistics.—The fisheries statistics of Canada are issued under an arrangement for statistical co-operation between the Dominion Bureau of Statistics, the Dominion Department of Fisheries, and those branches of the different Provincial Governments having jurisdiction with regard to fisheries. Under this

* A new convention, generally similar to that of 1930 but embodying several changes, was signed at Ottawa on Jan. 29, 1937.

arrangement, the statistics of the catch and of the products marketed in the fresh state or domestically prepared are collected by the local fishery officers, checked in the Department of Fisheries, so far as operations in areas where the fisheries are under Dominion administration are concerned, and compiled in the Dominion Bureau of Statistics. In the case of manufactured fish products, schedules similar to those of other sections of the Census of Industry are sent by the Bureau to the operators of canneries, fish-curing establishments, etc., the fisheries officers assisting in securing expeditious and correct reports.

Section 4.—The Modern Fishing Industry.*

The latter half of the nineteenth century saw the commencement of expansion in the commercial fishing industry of Canada. In 1844 the estimated value of the catch was only \$125,000. It doubled in the following decade and by 1860 had passed the million mark. Ten years later it reached \$6,000,000 and this was again more than doubled by 1878. By 1900 it had reached a total of \$21,000,000 and the growth continued with little interruption until 1918, when it reached the high record of \$60,000,000. Since then there have been decreases in value, due to lower prices rather than to smaller catches. In 1936 the value was \$39,165,055 and



* Revised by Miss F. A. Brown, Chief of the Fisheries, Fur, and Dairy Statistics Branch, Dominion Bureau of Statistics. This Branch publishes an Annual Report on the Fisheries Statistics of Canada, together with advance summaries on fish caught, marketed, and prepared, by provinces. These may be obtained from the Dominion Statistician.

showed an increase of 13.7 p.c. over 1935. It will be understood that the figures given represent the total value of the fish as marketed, whether in a fresh, dried, canned, or otherwise prepared state. The numbers of employees engaged in the industry have increased in proportion to the catch, amounting in some years to over 90,000, and the capital investment has gone as high as \$64,000,000. In 1936 the number of employees was 86,973, and the capital investment, \$45,831,842.

Among the different kinds of fish, the cod of the Atlantic and the salmon of the Pacific, in the earlier years of the fishing industry, disputed the primacy; since 1895 salmon has definitely taken the lead, and the heavy packs and high prices of lobsters have, in more recent years, sent cod down to third place. The value of output of the salmon fishery in the period 1869-1936 was approximately \$462,000,000, and that of the cod fishery, \$290,000,000. These facts have affected the relative standing of the provinces, British Columbia now occupying the leadership that in earlier times belonged to Nova Scotia. The record of production since 1870, production by provinces for the past six years, and the record of principal fish products for the past five years, are shown in Tables 2, 3, and 4, respectively.

2.—Total Values of the Products of the Fisheries of Canada, 1870-1936.

NOTE.—From 1870 to 1906, inclusive, years ended June 30; from 1908 to 1917 (a), inclusive, years ended Mar. 31; since and including 1917 (b), calendar years. No statistics are available for the nine-month period ended Mar. 31, 1907.

Year.	Value.	Year.	Value.	Year.	Value.	Year.	Value.
	\$		\$		\$		\$
1870.....	6,577,391	1887.....	18,386,103	1904.....	23,516,439	1920.....	49,241,339
1871.....	7,573,199	1888.....	17,418,508	1905.....	29,479,562	1921.....	34,931,935
1872.....	9,570,116	1889.....	17,655,254	1906.....	26,279,485	1922.....	41,800,210
1873.....	10,754,997	1890.....	17,714,900	1908.....	25,499,349	1923.....	42,565,545
1874.....	11,681,886	1891.....	18,977,874	1909.....	25,451,085	1924.....	44,534,235
1875.....	10,350,385	1892.....	18,941,169	1910.....	29,629,169	1925.....	47,942,131
1876.....	11,117,000	1893.....	20,686,659	1911.....	29,965,142	1926.....	56,380,633
1877.....	12,005,934	1894.....	20,719,570	1912.....	34,667,872	1927.....	49,123,609
1878.....	13,215,678	1895.....	20,199,338	1913.....	33,389,464	1928.....	55,050,973
1879.....	13,529,254	1896.....	20,407,424	1914.....	33,207,748	1929.....	53,518,521
1880.....	14,499,979	1897.....	22,783,544	1915.....	31,264,631	1930.....	47,804,216
1881.....	15,817,162	1898.....	19,667,121	1916.....	35,860,708	1931.....	30,517,306
1882.....	16,824,092	1899.....	21,891,706	1917 (a)....	39,208,378	1932.....	25,957,109
1883.....	16,958,192	1900.....	21,557,639	1917 (b)....	52,312,044	1933.....	27,496,946
1884.....	17,766,404	1901.....	25,737,153	1918.....	60,259,744	1934.....	34,022,323
1885.....	17,722,973	1902.....	21,959,433	1919.....	56,508,479	1935.....	34,427,854
1886.....	18,679,288	1903.....	23,100,878			1936.....	39,165,055

3.—Total Values of the Products of the Fisheries, by Provinces, calendar years 1931-1936.

Province.	1931.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	1,078,901	988,919	842,345	963,926	899,685	953,029
Nova Scotia.....	7,986,711	6,557,943	6,010,601	7,673,865	7,852,899	8,905,268
New Brunswick.....	4,169,811	2,972,682	3,000,045	3,679,970	3,949,615	4,399,735
Quebec.....	1,952,894	1,815,544	2,128,471	2,306,517	1,947,259	2,108,404
Ontario.....	2,477,131	2,147,990	2,089,842	2,218,550	2,852,007	3,209,422
Manitoba.....	1,241,575	1,204,892	1,076,136	1,465,358	1,258,335	1,667,371
Saskatchewan.....	317,963	186,174	186,417	219,772	252,059	367,025
Alberta.....	153,897	153,789	144,518	245,405	225,741	309,882
British Columbia.....	11,108,873	9,909,116	12,001,471	15,234,335	15,169,529	17,231,534
Yukon.....	29,550	20,060	17,100	14,625	20,725	13,885
Totals.....	30,517,306	25,957,109	27,496,946	34,022,323	34,427,854	39,165,055

4.—Quantities¹ and Values² of the Chief Commercial Fishes, calendar years 1932-36.

Kind of Fish.	1932.	1933.	1934.	1935.	1936.	Increase (+) or Decrease (-) 1936 compared with 1935.
Salmon.....cwt.	1,331,054	1,456,501	1,696,856	1,824,205	2,029,704	+205,499
\$	8,037,904	9,758,346	12,875,257	12,540,307	13,867,513	+1,327,206
Lobsters.....cwt.	483,488	374,916	361,992	319,969	283,273	-36,696
\$	4,745,311	3,524,355	4,269,764	4,378,742	4,383,428	+4,686
Cod.....cwt.	1,428,941	1,561,647	1,714,059	1,539,150	1,699,974	+160,824
\$	2,193,621	2,598,756	3,327,507	2,758,140	3,331,750	+573,610
Herring.....cwt.	1,862,372	2,056,706	1,901,874	2,060,320	2,852,381	+792,061
\$	1,473,288	1,747,863	1,799,967	1,817,540	2,576,533	+758,993
Sardines.....bbl.	66,910	130,485	191,549	187,666	247,238	+59,572
\$	426,914	623,976	1,039,002	1,335,798	1,598,562	+262,764
Whitefish.....cwt.	138,478	152,135	144,615	147,456	144,603	-2,853
\$	1,193,634	1,136,400	1,358,692	1,432,072	1,525,700	+93,628
Halibut ³cwt.	193,845	200,824	123,152	132,130	138,468	+6,338
\$	1,227,680	1,694,405	1,134,307	1,285,587	1,441,310	+155,723
Haddock.....cwt.	360,185	268,881	356,068	368,426	403,010	+34,584
\$	1,114,802	832,029	1,075,529	1,129,695	1,291,905	+162,210
Pickarel.....cwt.	89,498	106,272	122,512	109,548	145,635	+36,087
\$	707,957	623,343	844,848	801,822	1,109,397	+307,575
Trout.....cwt.	50,198	50,932	58,977	66,325	72,973	+6,648
\$	557,988	525,192	594,354	768,568	842,738	+74,170
Pilchards.....cwt.	886,964	121,013	860,103	911,411	889,037	-22,374
\$	383,920	77,464	549,910	670,328	667,313	-3,015
Smelts.....cwt.	96,163	77,699	59,909	79,409	94,868	+15,459
\$	690,964	495,632	557,538	588,333	655,656	+67,323
Blue pickerel.....cwt.	40,610	42,164	24,321	51,230	68,995	+17,765
\$	174,623	257,201	116,741	302,259	614,055	+311,796
Mackerel.....cwt.	178,453	263,316	190,818	160,495	227,638	+67,143
\$	276,947	396,306	421,013	308,721	461,866	+153,145
Ling cod.....cwt.	39,960	40,282	47,806	62,841	68,932	+6,091
\$	159,534	198,570	281,644	326,029	392,147	+66,118
Scallops.....gal.	46,792	86,344	89,890	133,225	170,762	+37,537
\$	77,141	161,779	168,415	207,641	334,424	+126,783
Hake and cusk.....cwt.	128,208	177,514	246,179	189,756	228,047	+38,291
\$	133,600	149,211	257,340	221,341	316,200	+94,859
Tullibee.....cwt.	47,644	42,300	44,076	39,721	59,265	+19,544
\$	224,138	265,204	204,984	225,808	276,464	+50,656
Perch.....cwt.	60,972	40,945	72,766	72,001	32,258	-39,743
\$	272,110	242,123	384,889	401,034	268,653	-132,381
Saugers.....cwt.	18,942	24,914	48,695	35,044	47,711	+12,667
\$	105,404	115,635	242,889	155,975	263,579	+107,604
Swordfish.....cwt.	10,359	17,137	14,091	22,339	17,853	-4,486
\$	99,585	208,038	176,640	264,097	230,798	-33,299
Pike.....cwt.	41,400	41,146	37,195	44,761	54,370	+9,609
\$	133,250	112,312	149,821	181,263	225,589	+44,326
Clams ⁴bbl.	49,922	38,281	42,657	68,972	71,637	+2,665
\$	167,851	107,522	111,885	173,626	192,910	+19,284
Oysters.....bbl.	23,041	22,424	24,964	27,113	26,965	-148
\$	115,102	126,533	158,241	178,126	189,922	+11,796
Eels.....cwt.	21,476	27,404	25,238	25,091	23,440	-1,651
\$	110,317	148,995	159,674	162,370	153,495	-8,875
Catfish.....cwt.	11,245	12,673	13,580	16,289	17,408	+1,119
\$	84,065	91,012	98,811	115,579	123,939	+8,360
Pollock.....cwt.	77,629	52,905	85,037	82,048	126,345	+44,297
\$	64,101	48,939	95,024	82,745	114,200	+31,455
Soles.....cwt.	9,683	10,757	14,469	16,578	24,301	+7,723
\$	47,424	56,901	71,741	79,246	108,409	+29,163

¹ Quantities caught.² Values marketed.³ Previous to 1934 the totals for halibut included landings at British Columbia ports by United States vessels, whereas from 1934 on the United States landings are excluded from the statistics and the figures cover landings by Canadian vessels only.⁴ Prior to 1935 clams and quahaugs were combined.

Quantities and Values in Recent Years.—The wide variations in prices from year to year make total values misleading. On the other hand, the quantities of different kinds of fish are stated in many different units, which make the total volume of production difficult to compare from year to year. An effort is made to overcome these difficulties in Table 5 by working out what the values would be

in a later year if prices had remained the same as in the preceding year. From 1935 to 1936 there was an increase of 13.7 p.c. in the total value of the fisheries. The increase due to higher prices was 4.8 p.c., while larger quantities caught accounted for the other 8.9 p.c. of the increase in total values. The improvement of actual values in 1936 amounted to over \$4,700,000; 35 p.c. of it was due to higher prices, and 65 p.c. to larger quantities.

5.—Value of the Fisheries Production of Canada in 1936 Compared with 1935, together with the Amounts of the Change Due to Price Fluctuations and Quantity Fluctuations, respectively, by Items.

Kind of Fish or Product.	Actual Value, 1936.	Value at Prices of 1935.	Actual Value, 1935.	Increase (+) or Decrease (-).	Due to Higher (+) or Lower (-) Prices.	Due to Larger (+) or Smaller (-) Quantities.
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Salmon.....	13,867	13,964	12,540	+1,327	-97	+1,424
Lobsters.....	4,383	3,875	4,378	+5	-508	-503
Cod.....	3,332	3,043	2,758	+574	+289	+285
Herring.....	2,577	2,272	1,813	+764	+305	+454
Sardines.....	1,599	1,760	1,336	+263	-161	+424
Whitefish.....	1,526	1,404	1,432	+94	+122	-28
Halibut.....	1,441	1,347	1,285	+156	+94	+62
Haddock.....	1,292	1,237	1,130	+162	+55	+107
Pickarel.....	1,109	1,066	802	+307	+43	+264
Trout.....	843	846	769	+74	-3	+77
Pilchards.....	667	658	670	-3	+9	-12
Smelts.....	656	703	588	+68	-47	+115
Blue pickerel.....	614	407	302	+312	+207	+105
Mackerel.....	462	437	309	+153	+25	+128
Ling cod.....	392	358	326	+66	+34	+32
Scallops.....	335	266	208	+127	+69	+58
Mixed fish.....	330	260	347	-17	+70	-87
Hake and cusk.....	316	269	221	+95	+47	+48
Tullibee.....	276	337	226	+50	-61	+111
Perch.....	269	180	401	-132	+89	-221
Saugers.....	264	212	156	+108	+52	+56
Swordfish.....	231	211	264	-33	+20	-53
Pike.....	225	220	181	+44	+5	+39
Clams.....	193	181	174	+19	+12	+7
Oysters.....	190	177	178	+12	+13	-1
Whales.....	172	193	105	+67	-21	+88
Eels.....	153	152	162	-9	+1	-10
Catfish.....	124	124	116	+8	-	+8
Pollock.....	114	128	83	+31	-14	+45
Soles.....	108	116	79	+29	-8	+37
Alewives.....	94	105	98	-4	-11	+7
Sturgeon.....	93	96	102	-9	-3	-6
Grayfish.....	87	79	58	+29	+8	+21
Shad.....	86	94	68	+18	-8	+26
Carp.....	55	62	73	-18	-7	-11
Black cod.....	53	49	66	-13	+4	-17
Goideyes.....	50	67	38	+12	-17	+29
Crabs.....	39	42	45	-6	-3	-3
Flounders.....	36	31	30	+6	+5	+1
Seals.....	34	33	20	+14	+1	+13
Tuna.....	23	18	13	+10	+5	+5
Tom cod.....	16	14	13	+3	+2	+1
Shrimps.....	9	8	25	-16	+1	-17
Fish meal, <i>n.e.s.</i>	247	237	231	+16	+10	+6
Fish skins and bones.....	22	20	22	-	+2	-2
Other fishery products.....	161	145	182	-21	+16	-37
Totals.....	39,165	37,503	34,428	+4,737	+1,662	+3,075
Increases, per cent.....	-	-	-	+13.7	+4.8	+8.9

**6.—Quantities and Values of Sea Fish and Products Marketed, calendar years
1935 and 1936.**

Kind of Fish or Product.	1935.		1936.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
I.—				
Cod, used fresh.....	cwt. 98,638	272,920	121,000	323,553
Cod, fresh fillets.....	" 58,454	456,925	95,246	749,434
Cod, green-salted.....	" 143,201	391,476	229,681	633,140
Cod, smoked fillets.....	" 43,906	377,193	54,024	465,369
Cod, smoked.....	" 155	1,158	304	2,122
Cod, dried.....	" 244,917	958,296	189,008	881,893
Cod, boneless.....	" 26,397	209,135	24,324	177,544
Cod, roe.....	" 25	300	42	420
Cod, canned.....	case 4,236	19,604	4,205	18,530
Cod, livers.....	cwt. 504	10,553	1,100	514
Cod-liver oil, medicinal.....	gal. 60,570	33,446	70,488	45,891
Cod-oil.....	" 93,913	27,434	89,811	33,340
Haddock, used fresh.....	cwt. 106,365	382,543	112,747	379,252
Haddock, fresh fillets.....	" 49,449	425,126	70,389	635,291
Haddock, canned.....	case 19,741	83,498	12,165	53,533
Haddock, smoked.....	cwt. 23,017	180,158	23,549	194,999
Haddock, smoked fillets.....	" 3,546	32,369	2,451	21,921
Haddock, green-salted.....	" 7,685	14,825	558	1,370
Haddock, dried.....	" 4,305	10,792	1,278	4,395
Haddock, boneless.....	" 47	284	97	519
Haddock, roe.....	" 47	485	61	625
Hake and cusk, used fresh.....	" 14,060	10,466	26,942	26,631
Hake and cusk, fresh fillets.....	" 4,505	27,010	8,140	49,651
Hake and cusk, green-salted.....	" 30,644	48,226	39,763	73,290
Hake and cusk, canned.....	case 8,373	32,490	13,043	56,991
Hake and cusk, smoked.....	cwt. Nil	-	25	125
Hake and cusk, smoked fillets.....	" 6,833	45,645	6,859	61,561
Hake and cusk, dried.....	" 20,183	45,858	13,516	32,638
Hake and cusk, boneless.....	" 1,581	9,245	2,342	13,477
Hake and cusk, oil.....	gal. 8,087	2,401	6,136	1,836
Pollock, used fresh.....	cwt. 8,114	18,038	7,629	21,968
Pollock, fresh fillets.....	" 50	244	387	2,576
Pollock, green-salted.....	" 6,579	10,263	12,033	15,875
Pollock, smoked.....	" 1	5	7	29
Pollock, dried.....	" 20,160	51,044	31,158	71,233
Pollock, boneless.....	" 50	250	8	25
Pollock, oil.....	gal. 10,362	2,901	8,462	2,494
Catfish, fresh.....	" 555	1,982	939	3,064
Catfish, fresh fillets.....	" 1,069	7,832	1,013	7,445
Catfish, smoked fillets.....	" Nil	-	7	42
Whiting, used fresh.....	cwt. 76	170	19	69
II.—				
Halibut, used fresh.....	" 131,951	1,184,228	138,416	1,305,735
Halibut, fresh fillets.....	" 23	295	Nil	-
Halibut, smoked.....	" 5	78	Nil	-
Halibut, canned.....	case 70	507	75	547
Halibut, livers.....	cwt. 2,359	100,479	2,772	135,028
Flounders, brill, plaice, used fresh.....	" 7,488	20,462	7,319	23,283
Flounders, fresh fillets.....	" 775	9,935	877	12,956
Skate, used fresh.....	" 3,100	6,394	1,567	6,194
Soles, used fresh.....	" 8,649	47,530	12,488	66,089
Soles, fresh fillets.....	" 2,643	31,716	3,917	42,320
III.—				
Herring, used fresh.....	" 235,166	308,245	195,463	238,059
Herring, canned (round).....	case 32,144	144,648	66,887	313,589
Herring, canned (kippered).....	" 6,749	21,115	6,593	32,297
Herring, smoked (round).....	cwt. 51,964	128,726	59,041	150,757
Herring, smoked (boneless).....	" 1,505	10,954	1,388	6,334
Herring, kippered.....	" 10,043	69,070	4,652	40,411
Herring, dry-salted.....	" 302,710	229,082	383,337	347,322
Herring, pickled.....	bbl. 33,623	137,052	32,484	142,413
Herring, used as bait.....	" 185,255	330,555	237,113	385,295
Herring, fertilizer.....	" 116,691	62,887	152,508	75,704
Herring, oil.....	gal. 365,533	76,919	810,250	204,191
Herring, meal.....	ton 6,183	174,454	11,218	383,900
Herring, scales.....	cwt. 984	2,433	4,107	12,112
Mackerel, used fresh.....	" 32,529	73,440	73,735	206,158
Mackerel, fresh fillets.....	" Nil	-	458	1,400
Mackerel, canned.....	case 98	480	402	1,536
Mackerel, smoked.....	cwt. Nil	-	31	275
Mackerel, pickled.....	bbl. 38,771	212,004	41,735	191,718
Mackerel, fillets (salted).....	" 453	6,024	3,012	36,652
Mackerel, used as bait.....	" 4,957	16,773	7,531	24,127
Sardines, canned.....	case 338,436	1,180,111	393,854	1,381,228
Sardines, sold fresh and salted.....	bbl. 112,458	155,687	159,715	217,334

6.—Quantities and Values of Sea Fish and Products Marketed, calendar years 1935 and 1936—continued.

Kind of Fish or Product.	1935.		1936.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
III.—concluded.				
Pilchards, used fresh.....	cwt. 191	1,300	173	208
Pilchards, canned.....	case 27,184	82,991	35,007	102,127
Pilchards, used as bait.....	bbl. 521	995	580	699
Pilchards, oil.....	gal. 1,649,392	359,326	1,217,097	290,216
Pilchards, meal.....	ton 8,681	225,716	8,715	274,063
IV.—				
Alewives, used fresh.....	cwt. 31,834	27,652	31,111	25,756
Alewives, salted.....	" 17,340	66,123	19,575	63,273
Alewives, smoked.....	" 1,231	3,439	1,505	3,625
Bass, used fresh.....	" 191	1,155	145	782
Perch, used fresh.....	" 848	5,104	1,168	7,633
Rosefish, fresh.....	" Nil	-	151	302
Rosefish, fresh filets.....	" Nil	-	653	3,918
Salmon, used fresh.....	" 319,717	2,082,336	243,471	2,016,972
Salmon, canned.....	case 1,530,320	9,663,305	1,882,275	11,139,391
Salmon, smoked.....	cwt. 109	1,514	75	1,572
Salmon, kippered.....	" 124	1,620	100	1,100
Salmon, dry-salted.....	" 146,641	408,006	149,533	331,524
Salmon, mild cured.....	" 20,368	279,576	13,321	192,614
Salmon, pickled.....	" 2,190	9,045	2,768	10,594
Salmon, used as bait.....	" 275	679	197	492
Salmon, roe.....	" 10,230	27,427	11,719	30,163
Salmon, meal.....	ton 806	21,275	2,083	66,701
Salmon, oil.....	gal. 61,313	10,738	171,326	38,717
Shad, used fresh.....	cwt. 9,625	42,828	13,373	54,801
Shad, salted.....	bbl. 117	1,157	422	4,231
Shad, salted filets.....	" 50	450	50	400
Smelts, used fresh.....	cwt. 78,279	580,323	93,866	647,843
Sturgeon, used fresh.....	" 503	7,602	212	2,733
Trout, used fresh.....	" 83	973	148	1,780
V.—				
Black cod, used fresh.....	" 6,390	34,490	4,965	31,585
Black cod, smoked.....	" 1,474	19,498	1,148	9,661
Black cod, smoked filets.....	" 120	1,200	Nil	-
Black cod, livers.....	" 241	10,674	235	12,251
Ling cod, used fresh.....	" 62,841	303,616	68,212	342,344
Ling cod, smoked filets.....	" Nil	-	240	2,400
Ling cod, livers.....	" 629	22,413	1,195	47,403
Red and rock cod, used fresh.....	" 2,501	9,936	3,266	13,820
Red and rock cod, smoked.....	" 38	457	Nil	-
VI.—				
Tuna, used fresh.....	" 2,392	8,648	3,906	17,799
Tuna, canned.....	case 1,074	4,444	525	5,700
Caplin, used fresh.....	bbl. 11,499	11,541	10,036	10,303
Eels, used fresh.....	cwt. 2,028	10,701	1,376	8,880
Grayfish, used fresh.....	" 400	80	1,626	432
Octopus, used fresh.....	" 271	1,094	206	982
Oulachons, used fresh.....	" 407	1,110	222	803
Squid, used as bait.....	bbl. 3,718	11,549	4,879	13,171
Swordfish, used fresh.....	cwt. 22,339	256,692	17,853	226,101
Swordfish, livers.....	" 340	7,405	267	4,697
Tom cod, used fresh.....	" 7,983	13,218	8,150	16,564
Mixed fish, used fresh.....	" 9,516	47,516	8,605	42,665
SHELL FISH—				
Abalone, used fresh.....	bbl. Nil	-	2	34
Clams, used fresh.....	" 40,343	61,046	41,602	71,421
Clams, canned.....	case 28,934	112,580	30,152	120,877
Clams, chowder.....	" Nil	-	175	612
Crabs, used fresh.....	cwt. 4,336	24,802	4,347	23,423
Crabs, canned.....	case 1,331	19,903	1,322	15,672
Lobsters, in shell.....	cwt. 115,151	2,073,804	102,785	2,033,687
Lobsters, meat.....	" 1,093	55,242	917	57,668
Lobsters, canned.....	case 99,905	2,195,633	88,102	2,229,967
Lobsters, tomalley.....	" 5,539	54,063	6,469	62,106
Mussels, fresh.....	cwt. 12	24	Nil	-
Oysters, used fresh.....	bbl. 26,026	171,061	23,364	168,359
Oysters, canned.....	case 1,087	7,065	3,601	21,563
Quahaugs, used fresh.....	bbl. 736	1,918	928	2,210
Quahaugs, canned.....	case 949	4,773	1,250	7,557
Quahaugs, chowder.....	" 100	350	Nil	-
Scallops, shelled.....	gal. 133,057	207,153	170,610	334,016
Scallops, canned.....	case 54	488	34	408

**6.—Quantities and Values of Sea Fish and Products Marketed, calendar years
1935 and 1936—concluded.**

Kind of Fish or Product.	1935.		1936.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
SHELL FISH—concluded.				
Shrimps, used fresh..... cwt.	1,545	15,413	646	9,557
Shrimps, canned..... case	483	10,079	25	270
Winkles, used fresh..... cwt.	438	915	428	663
SPECIAL PRODUCTS—				
Dulse, dried..... “	1,078	8,136	426	3,346
“..... “	80	56	100	75
Seaweed, dried..... ton	61	3,050	51	2,040
Tongues and sounds, pickled or dried..... cwt.	612	4,863	722	4,830
Seal skins, fur..... No.	841	1,671	1,888	5,664
Seal skins, hair..... “	8,740	11,379	14,238	15,999
Porpoise skins..... “	577	11,510	28	392
Whalebone meal..... ton	211	4,642	332	6,840
Whale fertilizer..... “	354	11,328	687	20,610
Seal oil..... gal.	27,231	6,623	49,016	12,407
Porpoise oil..... “	10,550	1,055	176	35
Whale oil..... “	426,772	89,390	763,740	144,751
Grayfish oil..... “	134,470	26,165	176,568	38,945
Fish oil, <i>n.e.s.</i> “	71,351	15,181	12,020	3,630
Grayfish meal..... ton	1,065	31,834	1,343	47,406
Fish meal, <i>n.e.s.</i> “	5,230	231,420	5,363	247,094
Fish skins and bones..... cwt.	20,531	22,086	18,587	22,246
Fish offal and fertilizer..... ton	997	1,697	3,381	3,165
Other products.....	—	43,092	—	40,029
Total Values, Sea Fish and Products.....	—	29,175,400	—	32,951,504

7.—Quantities and Values of Inland Fish Marketed, calendar years 1935 and 1936.

Kind of Fish or Product.	1935.		1936.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
Alewives, fresh..... cwt.	830	1,030	687	974
Bass, fresh..... “	693	8,542	613	7,710
Carp, fresh..... “	21,026	73,484	17,770	54,969
Catfish, fresh..... “	12,527	105,751	13,407	113,388
Catfish, smoked..... “	1	14	Nil	—
Eels, fresh..... “	23,063	151,669	22,064	144,615
Freshwater drum..... “	73	627	205	722
Goldeyes, fresh..... “	450	3,783	3,242	23,758
Goldeyes, smoked..... “	1,807	34,048	1,596	26,692
Herring, fresh..... “	34,536	121,400	50,919	243,649
Ling..... “	1,572	1,633	3,161	3,407
Maskinonge, fresh..... “	937	10,388	637	7,365
Mixed fish, fresh..... “	46,849	299,956	44,569	287,794
Mullets, fresh..... “	3,297	7,006	42	57
Perch, fresh..... “	71,153	395,930	31,090	261,020
Pickereel or doré, fresh..... “	109,548	801,822	145,635	1,109,397
Pickereel, blue, fresh..... “	51,230	302,259	68,995	614,055
Pike, fresh..... “	44,761	181,263	54,370	225,589
Salmon, fresh..... “	2,069	34,786	2,274	37,673
Saugers, fresh..... “	35,044	155,975	47,711	263,579
Shad, fresh..... “	4,389	21,890	5,900	23,059
Shad, salted..... bbl.	200	2,149	300	3,038
Smelts, fresh..... cwt.	1,130	8,010	1,002	7,813
Sturgeon, fresh..... “	6,473	91,383	6,351	87,832
Sturgeon, caviar..... lb.	2,894	2,744	2,081	1,941
Suckers..... cwt.	6,973	9,437	12,470	20,333
Trout, fresh..... “	66,242	767,595	72,825	840,958
Tullibee, fresh..... “	37,369	214,585	56,920	268,188
Tullibee, smoked..... “	1,470	11,223	1,407	8,276
Whitefish, fresh..... “	147,430	1,431,803	144,586	1,525,519
Whitefish, smoked..... “	16	269	10	181
Total Values, Inland Fish and Products...	—	5,252,454	—	6,213,551

8.—Numbers of Fish-Canning and -Curing Establishments, by Provinces, 1935 and 1936.

Kind of Establishment.	P.E.I.	N.S.	N.B.	Que.	B.C.	Total for Canada.
	No.	No.	No.	No.	No.	No.
1935.						
Lobster canneries.....	89	77	86	52	—	304
Salmon canneries.....	—	1	—	31	43	75
Clam canneries.....	1	3	8	—	2	14
Sardine and other fish canneries.....	—	7	4	—	3	14
Fish-curing establishments.....	5	80	32	44	33	194
Freezing plants.....	—	3	4	4	2	13
Reduction plants.....	—	5	3	—	8	16
Totals, 1935.....	95	176	137	131	91	630
1936.						
Lobster canneries.....	84	76	80	64	—	304
Salmon canneries.....	—	2	—	20	46	68
Clam canneries.....	2	3	10	—	2	17
Sardine and other fish canneries.....	1	7	4	1	2	15
Fish-curing establishments.....	6	76	28	47	31	188
Freezing plants.....	—	2	4	7	2	15
Reduction plants.....	—	6	3	—	8	17
Totals, 1936.....	93	172	129	139	91	624

9.—Values of Materials Used and of Products of Fish-Canning and -Curing Establishments, 1932-36.

Material and Product.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$
Materials Used—					
Fish.....	7,708,713	8,178,543	11,638,820	10,958,895	11,916,080
Edible oils.....	1	1	1	1	137,144
Salt.....	170,385	216,618	236,185	212,554	256,651
Containers.....	2,190,935	2,321,918	3,345,792	3,152,924	3,672,437
Other.....	193,598	243,210	346,363	448,349	477,626
Totals, Materials Used.....	10,263,631	10,960,289	15,567,160	14,772,722	16,459,938
Products—					
Fish marketed for consumption, fresh..	4,243,614	4,337,130	4,897,000	5,204,465	6,430,174
Fish canned, cured or otherwise prepared.....	12,440,511	13,043,193	19,159,927	18,253,891	20,254,627
Totals, Products.....	16,684,125	17,380,323	24,056,927	23,458,356	26,684,801

¹ Included with "Other".

Capital and Employees.—The total capital invested reached an all-time record of \$64,026,297 in 1930, declined successively for three years to \$40,914,057 in 1933, rose again in 1934 and in 1935, and in 1936 reached \$45,831,842, an increase of \$2,213,954 over 1935 and of \$4,917,785 over 1933, the low year of the period 1920 to 1936. The number of persons employed in the primary and secondary operations connected with the fishing industry declined from 80,450 in 1929 to 74,882 in 1931, rose steadily since then to 83,436 in 1934, dropped in 1935 to 82,918, and rose again to 86,973 in 1936. The 1936 figure is the highest in the period 1920 to 1936.

10.—Numbers and Capital Values of Fishing Vessels, Boats, Nets, Traps, etc., Used in the Fisheries of Canada, and of Establishments Processing the Products, 1935 and 1936.

Equipment or Kind of Establishment.	1935.		1936.	
	Number.	Value. \$	Number.	Value. \$
Sea Fisheries—				
Boats (gasolene).....	19,695	7,463,895	20,155	7,645,067
Sailing and gasolene vessels.....	942	4,031,570	1,000	4,170,500
Lobster traps.....	2,013,969	2,175,824	2,134,762	2,321,774
Carrying smacks and scows.....	628	1,549,789	585	1,676,335
Salmon drift nets.....	11,645	1,059,304	13,054	1,146,022
Gill nets.....	69,331	885,762	71,594	929,595
Small fish- and smoke-houses.....	8,974	762,093	8,161	701,633
Fishing piers and wharves.....	1,773	668,800	1,759	665,020
Boats (sail and row).....	15,016	450,604	15,158	425,278
Smelt nets.....	15,726	325,197	17,289	372,074
Salmon trap nets.....	998	384,590	949	367,260
Weirs.....	344	313,137	374	299,093
Tubs of trawl.....	20,345	261,970	22,055	288,887
Trap nets, other.....	597	277,968	551	264,860
Freezers and ice-houses.....	605	228,220	620	233,800
Seines, other.....	796	214,425	843	213,575
Salmon purse seines.....	320	355,850	188	207,200
Hand lines.....	71,433	159,852	72,906	161,034
Steam fishing vessels.....	5	125,000	6	150,000
Lobster pounds.....	55	77,180	54	69,830
Steam trawlers.....	3	82,000	3	68,750
Skates of gear.....	2,561	50,244	2,833	52,975
Scallop drags.....	806	28,085	835	23,278
Crab traps.....	6,591	24,972	7,265	27,225
Pound nets.....	74	9,250	62	8,680
Oyster rakes.....	1,782	5,343	1,605	6,423
Salmon drag seines.....	9	5,430	9	5,800
Otter trawl.....	11	1,550	14	2,050
Eel traps.....	401	737	395	734
Quahaug rakes.....	122	436	184	628
Oulachon nets.....	29	775	18	540
Weir drivers.....	11	4,100	-	1
Other gear.....	-	16,102	-	37,761
Total Values, Sea Fisheries.....	-	22,000,054	-	22,543,681
Inland Fisheries—				
Gill nets.....	-	1,339,537	-	1,547,136
Boats (gasolene).....	1,599	887,960	1,682	888,723
Tugs.....	84	589,250	99	653,450
Pound nets.....	1,095	553,080	1,152	542,628
Freezers and ice-houses.....	940	425,154	915	375,635
Fishing piers and wharves.....	549	179,049	546	164,943
Weirs.....	935	125,960	919	125,950
Fish carriers.....	25	137,776	27	125,850
Boats (skiffs and canoes).....	3,553	120,180	3,608	119,972
Small fish- and smoke-houses.....	170	52,870	196	60,125
Hoop nets.....	1,098	22,719	1,116	24,929
Seines.....	182	22,052	168	21,533
Lines.....	2,749	14,104	2,876	19,581
Spears.....	210	1,624	231	1,687
Fish wheels.....	12	1,000	9	765
Dip or roll nets.....	130	593	97	402
Eel traps.....	60	120	130	260
Total Values, Inland Fisheries.....	-	4,473,028	-	4,673,569
Fish-Canning and -Curing Establishments—²				
Salmon canneries.....	75	7,774,845	68	9,365,076
Fish-curing establishments.....	194	5,432,658	188	4,606,602
Sardine and other fish canneries.....	14	1,545,424	15	1,690,575
Lobster canneries.....	304	1,219,522	304	1,606,073
Reduction plants.....	16	560,026	17	798,694
Freezing plants.....	13	516,104	15	433,680
Clam canneries.....	14	96,227	17	113,892
Totals for Fish-Canning and -Curing Establishments.....	630	17,144,806	624	18,614,592
Grand Totals, Capital Invested in Fisheries	-	43,617,888	-	45,831,842

¹ Included with "Other gear".

² Comprises values of land, buildings and machinery, products and supplies on hand, accounts and bills receivable, and cash.

11.—Numbers of Persons Employed in the Fisheries of Canada and in Processing Establishments Connected Therewith, 1934-36.

Employed in—	Sea Fisheries.			Inland Fisheries.		
	1934.	1935.	1936.	1934.	1935.	1936.
	No.	No.	No.	No.	No.	No.
Steam trawlers.....	65	70	75	Nil	Nil	Nil
Vessels.....	4,840	4,948	5,083	1	1	1
Boats.....	48,505	47,845	48,948	8,292	8,252	8,994
Carrying smacks and collecting vessels..	851	901	965	134	123	132
Fishing, not in boats.....	3,278	3,069	3,300	2,669	3,349	4,238
Totals, Fishermen².....	57,539	56,833	58,371	11,095	11,724	13,364

¹ Included with boats. ² These totals include all individuals employed in primary fishing operations irrespective of the period of employment. The census figure for 1931, given on p. 319, includes only those whose main occupation was fishing.

12.—Employees in Fish-Canning and -Curing Establishments, 1934-36.

Employed in—	1934.			1935.			1936.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
	No.	No.	No.	No.	No.	No.	No.	No.	No.
Lobster canneries.....	2,633	3,429	6,062	2,269	3,312	5,581	2,278	3,256	5,534
Salmon canneries.....	2,714	2,341	5,055	2,509	2,331	4,840	2,960	2,553	5,513
Clam canneries.....	45	108	153	64	158	222	94	177	271
Sardine and other fish canneries.....	292	360	652	311	335	646	374	354	728
Fish-curing establishments	2,321	201	2,522	2,376	265	2,641	2,421	307	2,728
Freezing plants.....	51	2	53	163	21	184	138	10	148
Reduction plants.....	292	13	305	239	8	247	308	8	316
Totals.....	8,348	6,454	14,802	7,931	6,430	14,361	8,573	6,665	15,238

13.—Employees and Salaries and Wages in Fish-Canning and -Curing Establishments, 1920-36.

Year.	On Salaries.		On Wages.		Contract and Piece-Workers.		Totals.	
	No.	\$	No.	\$	No.	\$	No.	\$
1920.....	651	759,176	13,137	3,180,701	4,711	916,413	18,499	4,856,290
1921.....	487	551,330	10,534	2,023,040	3,083	399,016	14,104	2,973,386
1922.....	614	682,535	11,848	2,358,780	4,115	600,415	16,577	3,641,730
1923.....	585	681,101	11,265	2,443,971	3,597	644,842	15,447	3,769,914
1924.....	574	755,631	10,583	2,588,717	4,379	890,413	15,536	4,234,761
1925.....	632	806,418	10,687	3,166,045	4,953	998,704	16,272	4,971,167
1926.....	546	733,760	11,579	3,807,533	5,283	1,081,544	17,408	5,622,837
1927.....	639	871,211	11,343	3,769,791	4,715	732,949	16,697	5,373,951
1928.....	630	853,800	10,579	3,539,070	4,225	868,226	15,434	5,261,096
1929.....	660	951,669	11,122	3,668,802	4,585	791,384	16,367	5,411,855
1930.....	591	918,952	9,967	3,383,902	5,164	1,023,609	15,722	5,326,463
1931.....	540	692,270	9,577	2,069,153	2,954	421,452	13,071	3,182,875
1932.....	486	602,760	9,799	1,741,404	3,439	477,714	13,724	2,821,878
1933.....	473	558,500	9,453	1,728,885	4,116	736,683	14,042	3,024,068
1934.....	548	676,124	9,642	2,193,995	4,612	684,956	14,802	3,555,075
1935.....	550	703,075	9,468	2,171,478	4,343	679,395	14,361	3,553,948
1936.....	558	734,678	10,073	2,544,903	4,607	724,269	15,238	4,003,850

Trade.—The domestic consumption of fish is relatively small in Canada and the trade depends largely upon foreign markets. From 60 to 70 p.c. of the annual capture is an average export, of which the United States takes approximately one-half and the United Kingdom one-fourth. In the calendar year 1936, total exports amounted to \$25,398,102, of which \$12,917,592 went to the United States and \$5,781,730 to the United Kingdom. A further division shows that \$9,388,184 went to British Empire countries and \$16,009,918 to foreign countries. The most important single export is canned salmon (to the United Kingdom and European markets), followed by fresh lobster, canned lobster, fresh whitefish, fresh salmon, and dried cod (to the West Indies, South America, etc.). For fresh fish the United States is the chief market. Canadian imports of fishery products in the calendar year 1936 amounted to \$2,918,251. A general review of the import and export trade in fish for 36 years past is given in Table 14, by fiscal years, while Table 15 gives a comparative record of exports, by countries, during the calendar years 1935 and 1936. Table 16 shows the leading items of export for the calendar years 1934-36. For a complete analysis of imports and exports, as well as of production, see the annual report "Fisheries Statistics", issued by the Dominion Bureau of Statistics.

14.—Values of Exports and Imports of Fish and Fish Products, fiscal years 1902-37.

NOTE.—In this table "Exports" includes seal skins, fish oils and whale oil, and "Imports" includes turtles, whalebone, shells and their products, fur skins of marine animals, fish oils and ambergris, in addition to fishery products as shown in Tables 12 and 13 of Chapter XVI on External Trade, in this volume.

Fiscal Year.	Exports, Fisheries, Domestic.	Imports of Fish for Home Consumption.		Fiscal Year.	Exports, Fisheries, Domestic.	Imports of Fish for Home Consumption.	
		Dutiable.	Free.			Dutiable.	Free.
	\$	\$	\$		\$	\$	\$
1902.....	14,143,294	620,706	525,459	1920.....	42,227,996	2,605,379	1,446,493
1903.....	11,800,184	659,717	743,703	1921.....	33,615,119	2,416,152	1,876,303
1904.....	10,759,029	734,800	850,945	1922.....	29,578,392	2,172,850	996,763
1905.....	11,114,318	752,558	751,402	1923.....	27,816,935	2,066,300	899,531
1906.....	16,025,840	814,540	1,234,563	1924.....	30,925,769	1,878,336	648,696
1907 ¹	10,362,142	735,045	924,046	1925.....	33,967,009	2,064,222	997,059
1908.....	13,867,367	838,037	1,103,649	1926.....	37,487,517	1,949,269	641,240
1909.....	13,319,664	784,176	925,173	1927.....	36,365,454	2,347,890	909,188
1910.....	15,663,162	952,522	820,183	1928.....	35,660,287	2,595,591	1,181,067
1911.....	15,675,544	1,175,072	820,019	1929.....	37,962,929	2,956,182	1,218,386
1912.....	16,704,678	1,261,096	1,148,522	1930.....	37,185,185	3,078,385	1,100,335
1913.....	16,336,721	1,608,663	910,923	1931.....	29,693,978	2,393,870	988,689
1914.....	20,623,560	1,558,663	773,109	1932.....	24,854,088	1,726,622	701,632
1915.....	19,687,068	1,155,186	701,112	1933.....	17,425,228	1,281,466	425,138
1916.....	22,377,977	895,371	695,702	1934.....	20,972,444	1,278,497	539,456
1917.....	24,889,253	1,347,511	1,128,768	1935.....	23,294,508	1,799,936	726,168
1918.....	32,602,151	1,039,585	1,884,041	1936.....	25,572,665	1,877,831	798,380 ²
1919.....	37,137,072	1,054,848	2,128,970	1937.....	26,702,831	1,942,849	1,101,926

¹ Nine months.

² Revised since the publication of the 1937 Year Book.

**15.—Exports of the Fisheries, the Produce of Canada, by Principal Countries,
calendar years 1935 and 1936.**

Exports to—	1935.	1936.	Exports to—	1935.	1936.
\$	\$	\$	\$	\$	\$
British Empire.			Foreign Countries.		
United Kingdom.....	6,759,505	5,781,730	Belgium.....	151,827	150,618
Africa, British South.....	419,089	420,847	Brazil.....	53,409	16,071
Africa, British West.....	15,790	27,052	China.....	156,805	165,478
Bermuda.....	38,501	37,681	Cuba.....	239,834	220,911
British India.....	40,876	35,726	Denmark.....	34,125	16,507
Ceylon.....	1,612	4,380	France.....	806,619	896,669
Straits Settlements.....	15,691	15,906	Germany.....	283,499	79,493
British Guiana.....	132,495	134,939	Haiti.....	46,827	93,991
Barbados.....	65,064	36,854	Italy.....	94,045	2,891
Jamaica.....	493,767	342,104	Japan.....	780,977	624,903
Trinidad and Tobago.....	306,188	243,389	Netherlands.....	69,945	72,339
Hong Kong.....	79,444	29,452	Dutch Guiana.....	21,996	15,370
Newfoundland.....	60,780	22,129	Norway.....	37,189	73,354
Australia.....	2,060,351	1,668,594	Portugal.....	Nil	93
Fiji.....	52,549	73,453	Portuguese Africa.....	35,018	23,782
New Zealand.....	282,648	391,466	Santo Domingo.....	67,010	87,904
Palestine.....	16,116	11,724	Sweden.....	227,554	273,618
			United States.....	10,321,296	12,917,592
			Philippine Islands.....	33,950	20,226
			Puerto Rico.....	334,937	113,664
Totals, British Empire¹	10,956,538	9,388,184	Totals, Foreign Countries¹	13,902,948	16,009,918
			Grand Totals, Exports.	24,859,486	25,398,102

¹ Totals include other countries not specified.

**16.—Exports of the Fisheries of Canada, by Quantities and Values, calendar years
1934-1936.**

Kind of Fish or Product.	1934.		1935.		1936.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$		\$
Fish—						
Alewives, salted..... cwt.	49,776	98,438	22,809	57,703	28,478	58,289
Bait fish..... ton	416	9,966	608	15,266	359	8,252
Clams, canned..... cwt.	391	2,318	428	4,893	191	2,068
Clams, fresh..... "	16,647	22,809	56,624	63,446	47,464	53,855
Codfish, boneless, canned or preserved, <i>n.e.s.</i> "	22,454	185,596	23,178	194,318	22,474	195,744
Codfish, dried..... "	338,460	1,956,004	291,569	1,538,203	213,444	1,074,572
Codfish, fresh and frozen..... "	9,925	61,751	22,946	145,774	45,984	289,400
Codfish, green-salted (pickled)..... "	98,578	291,971	107,498	319,403	163,760	490,135
Codfish, smoked..... "	8,718	88,071	11,589	114,255	18,268	183,698
Eels, fresh and frozen..... "	8,712	56,477	8,053	54,059	5,671	34,213
Haddock, canned..... "	436	2,335	229	2,444	222	2,230
Haddock, dried..... "	8,781	40,776	11,598	49,181	4,398	16,849
Haddock, fresh and frozen..... "	26,659	202,960	28,307	168,856	51,147	309,754
Haddock, smoked..... "	8,277	78,194	9,987	92,598	8,048	82,032
Halibut, fresh and frozen..... "	43,437	393,006	53,092	485,975	64,319	595,318
Herring, lake, fresh and frozen..... "	7,490	85,336	7,240	72,399	14,047	163,926
Herring, sea, canned..... "	13,964	96,860	15,403	109,928	13,168	99,068
Herring, sea, dry-salted..... "	311,098	356,549	402,781	543,974	313,149	391,084
Herring, sea, fresh and frozen..... "	265,673	203,640	297,342	259,584	307,366	270,219
Herring, sea, pickled..... "	35,361	79,658	27,454	69,847	19,241	47,113
Herring, sea, smoked..... "	66,699	191,588	49,853	159,694	54,256	175,828
Lobsters, canned..... "	52,938	2,499,372	45,693	2,274,783	38,162	2,080,005
Lobsters, fresh..... "	97,485	1,550,452	92,049	1,641,300	98,864	2,100,762
Mackerel, fresh and frozen..... "	2,832	14,132	1,118	6,158	4,689	21,292
Mackerel, pickled..... "	110,951	350,346	84,724	319,285	89,145	279,816
Oysters, fresh..... "	2,316	12,005	1,081	7,365	413	2,750
Pilchards, canned..... "	6,240	51,375	5,603	45,577	7,496	57,315
Pollock, hake and cusk, boneless, canned or preserved, <i>n.e.s.</i> "	28	137	Nil	-	Nil	-
Pollock, hake and cusk, dried..... "	48,891	188,513	47,892	189,789	46,377	164,079
Pollock, hake and cusk, fresh and frozen..... "	956	2,201	1,772	3,094	5,580	16,258
Pollock, hake and cusk, green-salted..... "	18,252	28,991	10,084	14,402	24,706	36,478

16.—Exports of the Fisheries of Canada, by Quantities and Values, calendar years 1934-36—concluded.

Kind of Fish or Product.	1934.		1935.		1936.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Fish—concluded.		\$		\$		\$
Pollock, hake and cusk, smoked...cwt.	10	72	327	2,232	65	743
Salmon, canned.....“	391,645	5,906,424	508,478	7,394,632	471,838	6,367,323
Salmon, dry-salted (chum).....“	106,186	235,478	183,001	414,321	168,615	335,282
Salmon, fresh and frozen.....“	107,602	1,187,727	119,986	1,228,162	154,659	1,455,878
Salmon, pickled.....“	27,399	413,979	28,581	418,175	14,539	241,728
Salmon, smoked.....“	185	4,091	224	5,193	274	6,244
Salmon trout or lake trout, fresh and frozen.....“	33,006	301,446	39,771	378,531	45,970	468,710
Sardines (little fish in oil).....“	48,556	383,080	54,130	448,150	54,103	471,819
Shell fish, other, fresh.....“	7,066	117,175	9,278	162,727	14,217	245,827
Smelts, fresh and frozen.....“	49,458	575,787	71,550	740,259	83,170	819,804
Sturgeon, fresh and frozen.....“	1,088	28,319	1,349	38,978	1,658	46,942
Swordfish, fresh and frozen.....“	15,115	156,330	20,397	214,262	21,552	270,862
Tongues and sounds.....“	773	6,756	479	4,304	697	5,633
Tullibee, fresh and frozen.....“	11,186	47,586	25,437	143,493	18,576	113,114
Whale meat, canned or preserved..“	3	17	Nil	—	Nil	—
Whitefish, fresh and frozen.....“	101,397	977,147	117,478	1,260,375	119,234	1,458,827
Other fresh-water fish, fresh and frozen.....“	283,952	1,891,754	299,870	2,036,827	314,584	2,345,781
Other fresh-water fish, salted, dried, smoked or pickled.....“	30	122	179	1,703	714	6,763
Other sea fish, fresh and frozen.....“	5,433	29,863	6,195	34,896	8,325	60,056
Other sea fish, salted, dried, smoked or pickled.....“	3,604	19,415	6,783	31,875	2,528	12,382
Other sea fish, canned or preserved, <i>n.e.s.</i>“	200	2,440	33	553	17	313
Fishery Products—						
Fish livers.....cwt.	1	—	1	—	3,833 ¹	169,543 ¹
Fish meal.....“	245,915	484,865	148,884	245,449	320,079	539,483
Fish offal or refuse.....“	14,899	26,184	22,779	27,325	13,687	17,889
Oils—						
Cod-liver oil.....gal.	19,446	11,183	10,378	7,247	52,768	35,130
Seal oil.....“	1,818	392	Nil	—	Nil	—
Whale oil.....“	653,937	148,116	398,429	98,518	551,129	128,898
Other fish oil.....“	1,069,015	176,220	1,111,278	249,807	1,171,332	336,579
Seal skins, undressed.....No.	8,694	10,272	11,375	20,678	14,900	39,951
Other products of the fisheries.....“	—	150,068	—	227,261	—	94,196
Totals, Fish and Fishery Products....	—	22,497,135	—	24,859,486	—	25,398,102

¹ Information not available prior to April 1, 1936.

² Nine months, April to December, 1936.

Sharp increase in the value of fisheries exports, as compared with 1936 value, took place during 1937. Shipments of fish and fish products to export markets during the year had a value, in round figures, of \$28,834,000, or almost \$3,500,000 more than in the preceding year. So far as fisheries production in 1937 is concerned, preliminary figures indicate some decrease in the landings of sea fish and shell fish, but an increase in the landed value of the sea catches to the fishermen. Statistics of fresh-water catch and landed value are not available at the time of writing.

CHAPTER XII.—MINES AND MINERALS.*

NOTE.—An article on the geology of Canada will be found at pp. 16-17 of the present edition of the Year Book.

Historical Sketch.—The early settlements in the lower St. Lawrence valley were hemmed in by the non-agricultural rock formations of the Canadian Shield which approached closely to the first points of colonization. An important epoch of Canadian expansion, about the middle of the 19th century, coincided with the surmounting of the transportation difficulties presented by the arm of the Canadian Shield which crosses the St. Lawrence river above Montreal and is responsible for the series of rapids between that city and lake Ontario. A second and greater period of expansion followed again when railways bridged the barriers of rocky country separating lake Superior in the east and the Pacific coast in the west from the extensive agricultural plains of the Prairie Provinces. These forbidding areas, with their exposed ancient rocks, their forests, and their lakes, which impeded Canadian growth and agricultural settlement until nearly the end of the 19th century, since 1920 have become, because of their resources of pulpwood, water power, and mineral deposits, the chief source of the expansion of wealth and productive activity.

The discovery of minerals in Canada was closely associated with the early exploration of the country. Iron and silver, and later coal, were reported in Nova Scotia by some of the first French adventurers. Bellin's maps published in 1744 indicated the existence of silver-lead not ten miles distant from the now famous Cobalt Silver Camp. However, in the early period of Eastern Canada's history such development of mineral resources as occurred was almost entirely incidental to the agricultural colonization of the country and consisted principally of the smelting of bog iron ores and of the production of such necessities as salt and building materials.

Though coal was discovered on Vancouver island in 1835, it was the alluvial deposits of the Fraser river and the gold rush to the Cariboo in 1859 which really opened up the interior of the mainland, so that, on the western coast, mineral exploitation preceded agricultural settlement.

These early isolated discoveries were followed by others, notably the gold ores of Nova Scotia, the copper-nickel of Sudbury, the silver of Silver islet on lake Superior, copper-gold at Rossland, and silver-lead in the Kootenays. A foundation for the mining industry was laid with the setting up of the Geological Survey of Canada under Sir William Logan and the publication in 1863 of the "Geology of Canada". However, it was not until the mining development in British Columbia in the 1890's and the discovery of rich deposits of silver and gold in northern Ontario in the first decade of this century that the mining industry began to give promise of its tremendous possibilities. The effects of successive steps in the development of the mineral resources may be traced in the per capita figures of mineral production in Table 1, p. 343. The first period of rapid increase from 1895 to 1900 resulted from the placer discoveries of Yukon and the expansion of lode mining in British Columbia. The next important increase in 1906-13 followed the discovery of silver and gold at Cobalt and Porcupine.

* Revised by W. H. Losee, B.Sc., Chief of the Mining, Metallurgical and Chemical Branch, Dominion Bureau of Statistics. A complete list of the publications of this Branch appears in Chapter XXIX, Section 1, under "Production".

War prices stimulated the production of base metals from properties already developed, but on the whole active prospecting was much curtailed during the war period. However, in the decade following the War, new discoveries were widespread and the expansion was very rapid. The aeroplane furnished a means of comparatively easy access to remote districts and the discovery of new deposits of minerals increased annually. Important discoveries of base metals were the copper-gold areas of Rouyn in northwestern Quebec, and the copper-gold-zinc ore bodies near the Manitoba-Saskatchewan boundary. Expansion programs were carried out at nickel-copper properties in the Sudbury district of Ontario and silver-lead-zinc properties in British Columbia. New gold mines were brought to the production stage in northwestern Quebec, northwestern Ontario, and eastern Manitoba. An intrepid prospector went farther afield and uncovered silver-radium ores at the easterly end of Great Bear lake.

It should not be imagined from the brief outline given above that the successful and profitable development of mining enterprise in Canada has depended solely upon the *discovery* of the ore bodies. Even in the case of occurrences of free-milling gold ores, a long and expensive process of exploration is required before the possibilities of a property as an economic producer can be determined, and, in the majority of cases, though the original discovery may be promising, development yields disappointing results. In the case of base-metal ore-bodies, not only is the expenditure for preliminary development necessary, but also difficult problems in metallurgy are presented, requiring long periods of research and experiment for their solution before profitable production is made possible. The nickel-copper deposits of Sudbury were discovered in 1883, but production on an important scale did not come until after 1900 and the greatest expansion has occurred since the War. The great Sullivan silver-lead-zinc deposit in the Kootenay district of British Columbia was discovered in 1892, but production upon anything like the present scale did not come until after the War, when a successful method of separating the lead and zinc had been worked out.

Statistics of Mines and Minerals.—The compilation and publication of statistics concerning mines and minerals in the Dominion is carried out by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics, which works in close co-operation with the Mines Departments of the various Provincial Governments, collecting the data in collaboration with these Departments. Questionnaires sent to those engaged in mineral industries are designed to meet the requirements of both the Dominion and the provincial authorities, thus eliminating duplication of labour.

For more detailed information on the mineral production of Canada, the reader is referred to the various reports issued by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics. The more important of these are: annual preliminary reports on the mineral production of Canada; a complete, detailed, annual report on the mineral industries; monthly bulletins on the production of the 16 leading minerals; and monthly, quarterly, and annual reports on coal statistics. (See footnote to p. 335.)

The following material of this chapter is divided into six sections: (1) a sketch of the administration of mineral lands and mining laws; (2) a summary of general production; (3) the industrial statistics of the mineral industries; (4) production of metallic minerals; (5) production of non-metallic minerals; (6) production of clay products and structural materials.

Section 1.—Mineral Lands Administration and Mining Laws.

The mineral lands of Canada, like other Crown lands, are administered by either the Dominion or the Provincial Governments. The Dominion Government administers the mineral lands of Yukon and the Northwest Territories as well as those in all Indian Reserves, and in National Parks in the Prairie Provinces and British Columbia. Since the transfer of the natural resources to the Prairie Provinces in 1930, all other mineral lands lying within the boundaries of the several provinces have been administered by the respective Provincial Governments.

Subsection 1.—Dominion Mining Laws and Regulations.*

Dominion lands to which these regulations apply are those administered by the Department of Mines and Resources, and lie within Yukon and the Northwest Territories. Titles issued for Dominion lands, the property of the Dominion Government, in the Territories of Canada, reserve to the Crown the mines and minerals which may be found on or under such lands, together with the right of operation.

Placer.—Claims 500 feet long and from 1,000 to 2,000 feet wide, according to location, may be staked out and acquired by any person 18 years of age or over; claims to be marked by two legal posts, one at each end, and the line joining them marked. Creek claims are staked along the base line of the creek, and extend 1,000 feet on each side. River claims are 500 feet on one side of the river and extend back 1,000 feet. Other claims are staked parallel to the creek or river on which they front, 500 feet long by 1,000 feet. Expenditure in development of each claim to be incurred and proved each year, \$200 in Yukon and \$100 elsewhere. Royalty $2\frac{1}{2}$ p.c. under the Yukon Placer Mining Act.

Quartz.—"Mineral" under this heading means all deposits of metals and other useful minerals other than placer deposits, peat, coal, petroleum, natural gas, bitumen, and oil shales.

Under the present regulations, effective April 2, 1932, applicable to the Northwest Territories, any prospector or locator of a mineral claim, whether an individual, mining partnership or a company, must hold a miners licence, the fee being \$5 for an individual, from \$5 to \$20 for mining partnerships, and larger amounts proportionate to their capitalization for mining companies. A licensee may stake out 6 claims on his own licence and 12 more for 2 other licensees, not exceeding 18 in all in any one licence year in any mining division. A mineral claim shall be rectangular and marked by a post at each corner—maximum area 51.65 acres, being 1,500 feet square. Entry is granted by a mining recorder, fee \$5 for a claim located by a licensee on his own licence and \$10 if located on behalf of another licensee. Grant is renewable from year to year, subject to representation work to the value of \$100 being done on the location each year, and the renewal of the owner's miners licence. A maximum of 36 claims may be grouped for purposes of representation work. When prescribed representation work to the value of \$500 has been done and confirmed, discovery of mineral in place shown to have been made, a survey made by a Dominion land surveyor at grantee's expense, and certain other requirements met, a lease is issued for a term of 21 years, renewable, the rental for the full term of a

* For copies of any of the regulations referred to application may be made to the Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa.

claim not exceeding 51.65 acres being \$50. The cost of the survey, reckoned at \$100, may be counted as work done on the claim. When the profits of a mine exceed \$10,000 in any calendar year, there is a royalty of from 3 to 6 p.c. or higher, proportionate to profits. Miners licences are not required in Yukon under the Yukon Quartz Mining Act, but the general provisions of the Act are similar to those of the Quartz Mining Regulations above, except that the fee for a grant is \$10 and only 8 mineral claims may be grouped for operation.

In addition to these Quartz and Placer Mining Regulations, applicable to the Northwest Territories, and the Yukon Quartz and Placer Mining Acts, the following regulations regarding minerals are in force: *Yukon*.—Dredging Regulations; Petroleum and Natural Gas Regulations. *Yukon and Northwest Territories*.—Alkali Mining Regulations; Carbon-Black Regulations; Coal Mining Regulations; Potash Regulations and Domestic Coal Permits. *Northwest Territories*.—Dredging Regulations; Oil and Gas Regulations; Quarrying Regulations and Permits to remove sand, stone, and gravel from beds of rivers.

Subsection 2.—Provincial Mining Laws and Regulations.

The granting of land in any province except Ontario no longer carries with it mining rights upon or under such land. In Ontario mineral rights are expressly reserved if they are not to be included. Some early grants in New Brunswick and Quebec also included certain mineral rights. Otherwise mining rights must be separately obtained by lease or grant from the provincial authority administering the mining laws and regulations. Mining activities may be classified as placer, general minerals (usually metallic ores), fuel (coal, petroleum, gas), and quarrying. Under these divisions of the mining industry provincial regulations may be summarized as follows:—

Placer.—In those provinces in which placer deposits occur there are regulations defining the size of placer holdings, the terms under which they may be acquired and held, and the royalties to be paid.

General Minerals.—These are sometimes described as quartz, lode minerals, or minerals in place. The most elaborate regulations apply in this division. In all provinces a prospectors or miners licence to search for mineral deposits, valid for a year, must be obtained. A claim of promising-looking ground of a specified size may then be staked. This claim must be recorded within a time limit, with the payment of recording fees. Work to a specified value per annum must be performed upon the claim for a period up to five years, when a grant or lease of the mining rights may be obtained subject to fees or annual rental. The taxation most frequently applied is a percentage of net profits of producing mines.

Fuels.—In those provinces in which coal occurs, the size of holdings is laid down and the conditions regarding work and rental under which they may be held. In some cases royalties are provided for. In the cases of petroleum and natural gas, a boring permit on likely ground is usually first obtained. If oil or gas is discovered, the operator may obtain the lease or grant of a limited area subject to rental or fees. A royalty on production is sometimes payable.

Quarrying.—Regulations under this heading define the size of holding and the terms of lease or grant.

The more important features of the regulations dealing with these divisions of the mining industry are outlined for each of the provinces below.

Nova Scotia.—*Administration.*—Minister of Public Works and Mines, Parliament Buildings, Halifax. *Legislation.*—Mines Act (c. 22, R.S.N.S. 1923) and amending Acts of 1927 (c. 17), 1929 (c. 22), 1933 (c. 12), 1935 (c. 23), 1936 (c. 46), and 1937 (c.19).

General Minerals.—Prospectors licence at nominal fee. Lease of mining rights—40 years for gold and silver; 20 years, three times renewable, for other minerals; both subject to annual rental and performance of work.

Coal.—Royalty—12½ cents per long ton, with exemption of coal used in mining operations and for domestic purposes by workmen employed about the mine.

Quarrying.—Rights to limestone, gypsum, and building materials are acquired with ordinary land title.

New Brunswick.—*Administration.*—Department of Lands and Mines, Fredericton. *Legislation.*—Mining Act (c. 35, R.S.N.B. 1927), as amended by c. 27, 1927, and c. 23, 1933. In most grants of Crown land since about 1805, all mines and minerals are reserved to the Crown. Prior to that time, most of the land grants reserved only gold, silver, copper, lead, and coal.

General Minerals.—Prospectors licence costs \$10 for a year. *Claims.*—A prospector may stake 10 claims of 40 acres each which must be registered within 30 days and 25 days' work done in each claim within the year. All this work may be concentrated on one of a group of claims. Mining rights are granted by mining licence, renewable annually, upon payment of \$10 per claim. When the mine produces on a commercial basis, a 20-year lease under similar conditions may issue.

Fuel.—Royalties are 10 cents per long ton on coal and 5 p.c. on the value at the well's mouth for petroleum and natural gas.

Quebec.—*Administration.*—Minister of Mines, Quebec. Information and statistics on mining operations and geological explorations are to be found in the Annual Report of the Quebec Bureau of Mines. *Legislation.*—Quebec Mining Act (c. 80, R.S.Q. 1925) and amendments. In townships the Crown retains full mining rights on lands granted subsequently to July 24, 1880, and gold and silver rights on lands granted previously to that date. All mining rights belong to the Crown in most of the seigneuries.

General Minerals.—Miners certificate good for calendar year; fee \$10. *Claims.*—Five claims of 40 acres each must be recorded and 25 days' work per claim done within 12 months; a development licence renewable annually is granted upon payment of \$10 recording fee and 50 cents per acre. Mining rights can be purchased as a mining concession for \$5 per acre for superior minerals and \$3 per acre for inferior minerals. Operators must make annual returns to the Minister. Taxes are payable on annual profits at rates graduated from 4 p.c. upward.

Ontario.—*Administration.*—Department of Mines, Parliament Buildings, Toronto. A resident mining recorder is appointed for each mining division. *Legislation.*—Mining Act (c. 45, R.S.O. 1927), with amendments; applies to all Crown lands except Indian lands. Title is a grant in fee simple, except in provincial forests where mining lands are leased. There is no apex law, all claim boundaries extending vertically downwards. Disputes are settled by the recorder, or on appeal, by the Judge of the Mining Court of Ontario.

General Minerals.—Annual miners licence—fee \$5 for an individual; \$100 on each \$1,000,000 capital for companies; holder permitted to stake 3 claims

in any and every mining division for himself and 6 additional for other licence holders, but not more than 3 for any individual licensee. *Claims*.—In unsurveyed territory 20 chains square (40 acres) with lines N.-S. and E.-W. astronomically; in surveyed territory an eighth, a quarter or a half lot, *i.e.*, up to 50 acres. Representation work consists of the actual performance of at least 200 days' work within 5 years. *Taxation*.—Five cents per acre per annum on patented and leased mining lands with an area of 10 acres or over in unorganized territory; on net profits, with \$10,000 exempt, 3 p.c. up to \$1,000,000, 5 p.c. from \$1,000,000 to \$5,000,000 and 6 p.c. on the excess above \$5,000,000.

Fuels.—Petroleum, natural gas, coal, and salt on the James Bay slope may be searched for under authority of a boring permit. A total of 1,920 acres may be taken up by an individual in blocks of 640 acres. Certain areas have been withdrawn from staking.

Manitoba.—*Administration*.—Director, Mines Branch, Department of Mines and Natural Resources, Winnipeg; mining recorders' offices at Winnipeg and The Pas. *Legislation*.—The Mines Act (c. 27, 1930; c. 28, 1932; c. 25, 1933; c. 27, 1934) and regulations thereunder; the Mining Tax Act (c. 27, 1933; c. 44, 1937); and the Well Drilling Act (c. 50, 1937).

General Minerals.—The regulations follow closely those summarized for Dominion lands in Subsection 1, except that: not more than 3 claims may be staked for any one licensee, and not more than 9 altogether by one person in any year in any mining division; and representation work required is 25 days' work per year for 5 years for which purpose 9 claims may be grouped.

Fuels.—A prospecting permit, good for one year, is necessary to search for oil, coal, gas, or salt. If mineral is discovered a 21-year lease, subject to annual rental and certain work, is granted.

Quarrying.—Lands up to 40 acres containing building stone, clay, gravel, gypsum, or sand may be leased as a quarrying location at an annual rental.

Saskatchewan.—*Administration*.—Department of Natural Resources, Regina. *Legislation*.—Mineral Resources Act of 1931 and regulations thereunder; Saskatchewan Mines Act, providing for the competency of mine managers and pit bosses, for the reporting of accidents and the welfare and safety of those employed in the production of minerals; Coal Mining Industry Act, 1935, providing for a Coal Administrator to administer all legislation pertaining to the coal industry.

General Minerals.—The regulations follow closely those outlined for Dominion lands in Subsection 1, except that the holder of a miners licence may stake not more than 3 claims for himself and 3 for each of 2 other licensees, while not more than 9 claims may be grouped for representation work.

Coal.—Three locations may be applied for by mail or in person; the size of a location may be from 40 acres to 640 acres, but the length must not exceed three times the breadth. All operators must be licensed by the Coal Administrator, the licence being contingent upon payment of fair wages, workmen's compensation assessments, rentals, and royalties to the Crown and certain other conditions. Operators must mine annually 5 tons per acre, on leases issued since Jan. 1, 1936.

Petroleum and Natural Gas.—Locations may be applied for by mail or in person. The area of a location may be from 40 acres to 19,200 acres, and one person may

apply for 3 locations, but not over 19,200 acres in all, except in unsurveyed lands, in which the limit is 1,920 acres. An operator must obtain a permit and furnish a substantial bond. All drillers must secure licences of competency. The record of a driller may be obtained by payment of a fee.

Alberta.—*Administration.*—Department of Lands and Mines, Edmonton. There is a staff of inspectors of mines. *Legislation.*—The Coal Mines Regulation Act and regulations thereunder make provision for the safe operation of mines of coal, ironstone, shale, clay, and other minerals. Operating officials must hold certificates of competency. Monthly reports of operations must be returned to the Minister. The Coal Sales Act requires all coal mines to be registered by name and all coal produced to be sold under the registered name. The Coal Miners' Wages Security Act requires all coal operators to provide bond to insure the payment of wages, unless exemption is obtained through the Board of Public Utility Commissioners.

The general laws and regulations pertaining to mining and minerals are similar to those in force under the Dominion Government before the Provincial Government took over the natural resources in 1930. They follow closely those summarized in Subsection 1 of this chapter.

British Columbia.—*Administration.*—Department of Mines, Victoria. The Department includes all Government offices in connection with the mining industry. *Legislation.*—The Department of Mines Act and other Acts respecting mining and minerals, notably: The Mineral Act (c. 181, R.S.B.C. 1936); The Placer-Mining Act (c. 184, R.S.B.C. 1936); Metalliferous Mines Regulation Act (c. 189, R.S.B.C. 1936); The Coal-Mines Regulation Act (c. 188, R.S.B.C. 1936); and amendments to the above Acts.

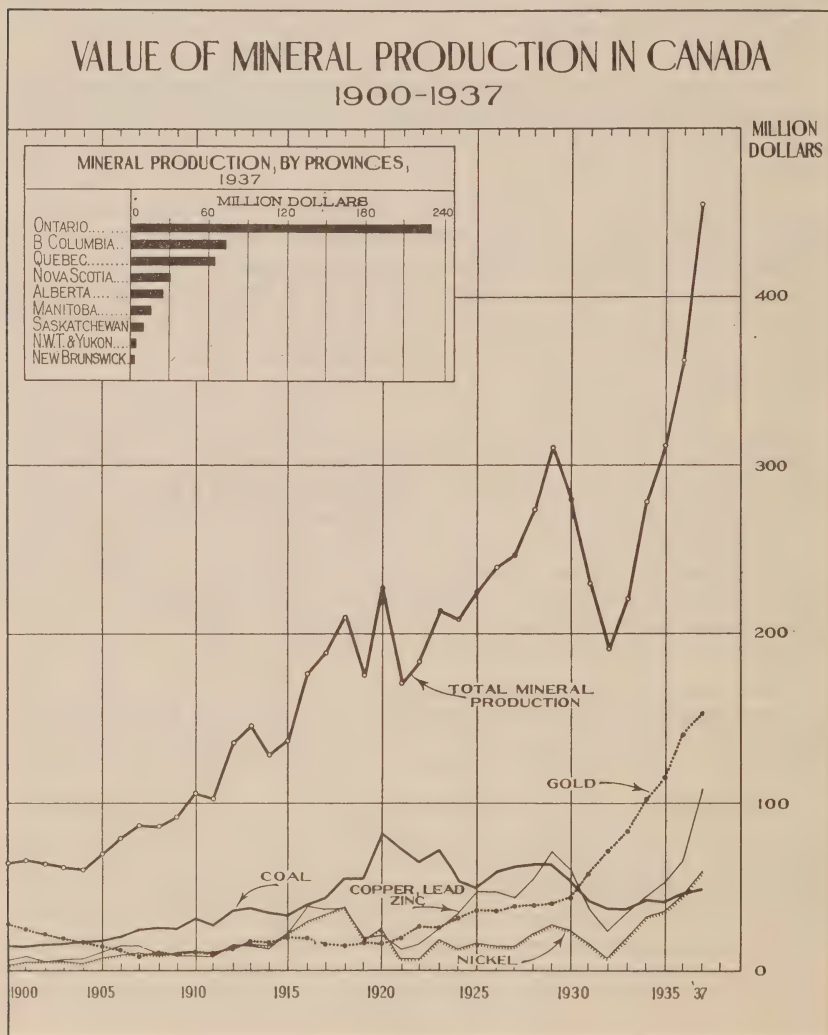
Placer.—Claims are of three classes: (1) creek diggings—250 feet long and 1,000 feet wide, 500 feet on each side of the stream; (2) bar diggings—250 feet square on a bar covered at high water, or a strip 250 feet long at high water, extending between high-water mark and extreme low-water mark; (3) dry diggings over which water never extends—250 feet square. A placer claim must be worked by the owner, or someone on his behalf continuously during working hours. Discontinuance for 72 hours, except in close season, lay-over, leave of absence, sickness or other reason satisfactory to the Gold Commissioner is deemed abandonment. To hold a placer claim more than one year, it must be again recorded before the expiration of the year.

Placer leases of unoccupied Crown lands, approximately 80 acres in extent, may be granted by the Gold Commissioner of the district, the annual rental for same being \$30 and the annual expenditure required in development work \$250. Provision is also made for the granting of special leases of areas in excess of that referred to above.

General Minerals.—The terms of the mining laws are favourable to the prospector and operator, fees and rentals being small. Prospectors licence or "free miners certificate"—applicant must be over the age of 18; fee for individual \$5 per annum; for a joint-stock company \$50 or \$100 per annum depending on capitalization. Mineral claims must not exceed 1,500 feet square (51.65 acres); work, amounting to \$500 which may be spread over 5 years, required to obtain a Crown grant, while surface rights are obtainable at a figure in no case exceeding \$5 per acre.

Section 2.—Summary of General Production.

The trend in the development of the mineral resources of Canada was affected by the incidence of the depression for several years after 1929. The decline in the prices of base metals materially reduced the prospecting for, and development of, new deposits of these metals, but the higher price of gold after 1932 greatly stimulated the development of auriferous deposits. Prospecting for gold ores and the exploration and development of known auriferous deposits have been more extensively carried on throughout Canada since 1932 than ever before. These activities have been common to both the older producing camps and new areas. In certain of the older camps properties closed prior to the revaluation of gold were reopened and placed in production or further explored as to their economic possibilities. In



some of the producing mines the higher price for the metal permitted a very considerable extension or increase of pay ore with the resultant milling of rock of lower gold content and important increases in ore reserves.

The economic recovery since 1932 and the rising trend in base-metal prices have resulted in a rapid increase in production from deposits which were already known and partly developed before 1929; this expansion has occurred in spite of the fact that base-metal prices have not yet reached the level relative to gold which existed prior to 1929. The metals, nickel, copper, lead, and zinc were produced in greater quantities in 1937 than ever before in Canada. Furthermore, during the past year there has been a revival of activity in the search for base-metal properties.

Production of various non-metallic minerals, especially asbestos and coal, have realized important gains since 1932. The gains in the structural materials industries, where recessions were severe during the period of business depression, have been encouraging since 1933, but there is room for a large expansion in this division when the construction industry recovers its normal activity.

In 1936, the latest year for which comprehensive world figures of the Imperial Institute are available, Canada stood first in the production of asbestos, nickel, and the platinum metals, second in radium, third in gold, zinc and copper, and fourth in lead and silver. During that year, Canada produced approximately 87 p.c. of the world production of nickel, 54 p.c. of the asbestos, 11 p.c. of the copper, 11 p.c. of the gold, 11 p.c. of the lead, 9 p.c. of the zinc, and 7 p.c. of the silver.

The Preliminary Report on the Mineral Production of Canada, released by the Dominion Bureau of Statistics in March, 1938, shows a total valuation of \$456,793,260 for the mineral output of the Dominion in 1937 compared with \$361,919,372 in 1936. This represents an increase of 20.8 p.c. and reflects the continuation of the improved conditions commencing in 1933.

Subsection 1.—General Statistics of Mineral Production.

In Table 1 will be found the total values of the minerals produced in Canada in each year since 1886, while Table 2 gives the details of the mineral production of 1935 and 1936, with the percentage of increase or decrease in the latter year.

1.—Value of Mineral Production in Canada, calendar years 1886-1937.

Calendar Year.	Total Value.	Value per Capita.	Calendar Year.	Total Value.	Value per Capita.	Calendar Year.	Total Value.	Value per Capita.
	\$	\$		\$	\$		\$	\$
1886.....	10,221,255	2.23	1904.....	60,082,771	10.31	1922.....	184,297,242	20.66
1887.....	10,321,331	2.23	1905.....	69,078,999	11.51	1923.....	214,079,331	23.76
1888.....	12,518,894	2.67	1906.....	79,286,697	12.86	1924.....	209,583,406	22.92
1889.....	14,013,113	2.96	1907.....	86,865,202	13.55	1925.....	226,583,393	24.38
1890.....	16,763,353	3.51	1908.....	85,557,101	12.92	1926.....	240,437,123	25.44
1891.....	18,976,616	3.93	1909.....	91,831,441	13.50	1927.....	247,356,695	25.67
1892.....	16,623,415	3.40	1910.....	106,823,623	15.29	1928.....	274,989,487	27.96
1893.....	20,035,082	4.06	1911.....	103,220,994	14.32	1929.....	310,850,246	31.00
1894.....	19,931,158	4.00	1912.....	135,048,296	18.28	1930.....	279,873,578	27.42
1895.....	20,505,917	4.08	1913.....	145,634,812	19.08			
1896.....	22,474,256	4.42	1914.....	128,863,075	16.36	1931.....	230,434,726 ¹	22.21 ¹
1897.....	28,485,023	5.56	1915.....	137,109,171	17.18	1932.....	191,228,225	18.20
						1933.....	221,495,253	20.74
1898.....	38,412,431	7.42	1916.....	177,201,534	22.15			
1899.....	49,234,005	9.41	1917.....	189,646,821	23.53	1934.....	278,161,590	25.67
1900.....	64,420,877	12.15	1918.....	211,301,897	25.93	1935.....	312,344,457	28.56
1901.....	65,797,911	12.25	1919.....	176,686,390	21.26	1936.....	361,919,372	32.82
1902.....	63,231,836	11.51	1920.....	227,859,665	26.63	1937 ²	456,793,260	41.08
1903.....	61,740,513	10.90	1921.....	171,923,342	19.56			

¹ Beginning with 1931 exchange equalization on gold production is included in total value. for 1937 are subject to revision.

² Figures

2.—Mineral Production of Canada, calendar years 1935 and 1936.

Mineral.	1935.		1936.		P.C. Increase (+) or Decrease (—) in 1936.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$	p.c.	p.c.
METALLICS.						
Arsenic (As ₂ O ₃)..... lb.	2,558,789	75,326	1,365,606	42,491	—46.6	—43.6
Bismuth..... " "	13,797	13,245	364,165	360,523	+2,539.8	+2,621.9
Cadmium..... " "	580,530	441,203	785,916	699,465	+35.4	+58.5
Chromite..... " "	1	14,947	1	13,578	—	—9.2
Cobalt..... lb.	681,419	512,705	887,591	804,676	+30.3	+56.9
Copper..... " "	418,997,700	32,311,960	421,027,732	39,514,101	+0.5	+22.3
Gold..... fine oz.	3,284,890	67,904,700	3,748,028	77,478,612	+14.1	+14.1
Estimated exchange equalization paid for gold produced..... \$	—	47,690,579	—	53,814,809	—	+12.8
Lead..... lb.	339,105,079	10,624,772	383,180,909	14,993,869	+13.0	+41.1
Manganese ore..... ton	100	800	221	1,596	+121.0	+99.5
Nickel..... lb.	138,516,240	35,345,103	169,739,393	43,876,525	+22.5	+24.1
Palladium, rhodium, irid- ium, etc..... fine oz.	84,772	1,962,937	103,671	2,483,075	+22.3	+26.5
Platinum..... " "	105,374	3,445,730	131,571	5,320,731	+24.9	+54.4
Selenium..... lb.	366,425	703,536	350,857	621,017	—4.2	—11.7
Silver..... fine oz.	16,618,558	10,767,148	18,334,487	8,273,804	+10.3	—23.2
Tellurium..... lb.	16,425	32,850	35,591	62,997	+116.7	+91.8
Titanium ore..... ton	2,288	16,400	2,566	18,318	+12.2	+11.7
Zinc..... lb.	320,649,859	9,936,908	333,182,736	11,045,007	+3.9	+11.2
Totals, Metallic Minerals..	—	221,800,849	—	259,425,194	—	+17.0
NON-METALLICS.						
<i>Fuels.</i>						
Coal..... ton	13,888,006	41,963,110	15,229,182	45,791,934	+9.7	+9.1
Natural gas..... M cu. ft.	24,910,786	9,363,141	28,113,348	10,762,243	+12.9	+14.9
Peat..... ton	1,340	5,761	1,341	7,376	+0.1	+28.0
Petroleum, crude..... bbl.	1,446,620	3,452,188	1,500,374	3,421,767	+3.7	+2.0
Totals, Fuels.....	—	54,824,200	—	59,983,320	—	+9.4
<i>Other Non-Metallic Minerals.</i>						
Asbestos..... ton	210,467	7,054,614	301,287	9,958,183	+43.2	+41.2
Bituminous sands..... " "	40	160	Nil	—	—	—
Diatomite..... " "	823	33,140	615	13,650	—25.3	—58.8
Feldspar..... " "	17,742	144,330	17,846	154,475	+0.6	+7.0
Fluorspar..... " "	75	900	75	900	Nil	Nil
Graphite..... " "	1	79,781	1	88,812	—	+11.3
Grindstones..... ton	708	34,010	569	24,724	—19.6	—27.3
Gypsum..... " "	541,814	932,203	833,822	1,278,971	+53.9	+37.2
Iron oxides (ochre)..... " "	5,516	77,075	5,854	69,630	+6.1	—9.1
Magnesitic dolomite..... " "	1	483,084	1	768,742	—	+58.2
Magnesium sulphate..... ton	340	7,965	654	13,712	+92.4	+72.2
Mica..... lb.	1,255,616	82,038	1,601,557	74,556	+27.6	—9.1
Mineral water..... Imp. gal.	146,516	16,590	154,286	18,516	+5.3	+11.6
Nepheline-syenite..... " "	Nil	—	1	37,426	—	—
Phosphate..... ton	186	1,103	525	4,927	+182.3	+346.7
Quartz..... " "	233,002	424,882	1,046,649	597,781	+349.2	+40.7
Salt..... " "	360,343	1,880,978	391,316	1,773,144	+8.6	—5.7
Silica brick..... M	2,461	96,194	2,393	97,285	—2.8	+1.1
Soapstone..... " "	1	32,053	1	32,770	—	+2.2
Sodium carbonate..... ton	242	2,430	192	1,677	—20.7	—31.0
Sodium sulphate..... " "	44,817	343,764	75,598	552,681	+68.7	+60.8
Sulphur ² " "	67,446	634,235	122,132	1,033,055	+81.1	+62.9
Talc..... " "	13,803	139,479	14,508	144,500	+5.1	+3.6
Totals, Other Non-Metallic Minerals.....	—	12,504,008	—	16,740,117	—	+33.9
Totals, Non-Metallic Minerals.....	—	67,328,208	—	76,723,437	—	+13.9

¹ Not available.² Sulphur content of pyrites shipped and estimated sulphur contained in the sulphuric acid made from smelter gases.

2.—Mineral Production of Canada, calendar years 1935 and 1936—concluded.

Mineral.	1935.		1936.		P.C. Increase (+) or Decrease (—) in 1936.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$	p.c.	p.c.
CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS.						
<i>Clay Products.</i>						
Brick—						
Soft Mud Process—						
Face..... M	6,995	122,215	6,097	111,378	—12.8	—9.2
Common..... M	21,197	259,504	24,180	302,690	+14.1	+16.6
Stiff Mud Process (wire cut)—						
Face..... M	25,289	500,066	30,218	575,765	+19.5	+15.1
Common..... M	32,334	437,123	35,592	484,078	+10.1	+10.7
Dry Press—						
Face..... M	8,454	175,042	8,961	165,924	+6.0	—5.5
Common..... M	6,381	55,253	10,241	100,785	+60.5	+82.4
Fancy or ornamental brick..... M	13	728	25	1,374	+92.3	+88.7
Sewer brick..... M	175	5,236	418	6,778	+138.9	+29.4
Paving brick..... M	15	627	116	3,149	+673.3	+402.2
Firebrick..... M	1,817	90,149	2,548	118,923	+40.2	+31.9
Fireclay and other clay ton	2,272	15,574	2,437	17,639	+7.3	+13.3
Kaolin..... "	170	1,520	Nil	—	—	—
Fireclay blocks and shapes..	1	71,344	1	65,171	—	—8.7
Hollow blocks..... ton	47,195	344,608	58,501	467,860	+24.0	+35.8
Roofing tile..... No.	82,015	3,669	52,730	2,139	—35.7	—41.7
Floor tile (quarries)...sq. ft.	51,765	7,629	97,738	13,798	+88.8	+80.9
Ceramic tile..... "	1	615	Nil	—	—	—
Drain tile..... M	7,124	205,336	8,148	214,590	+14.4	+4.5
Sewer pipe, copings, flue lin- ings, etc..... "	1	481,559	1	588,485	—	+22.2
Pottery, glazed or unglazed.	1	220,711	1	218,402	—	—1.0
Bentonite..... ton	41	781	120	180	+192.7	—76.9
Other clay products..... "	1	13,274	1	11,919	—	—10.2
Totals, Clay Products..	—	3,012,563	—	3,471,027	—	+15.2
<i>Other Structural Materials.</i>						
Cement..... bbl.	3,648,086	5,580,043	4,508,718	6,908,192	+23.6	+23.8
Lime..... ton	405,419	2,925,791	468,401	3,335,970	+15.5	+14.0
Sand and gravel..... "	21,213,489	6,389,440	22,124,160	6,921,399	+4.3	+3.3
Slate..... "	1,129	4,329	1,247	5,414	+10.5	+25.1
Stone—						
Granite..... "	326,354	1,126,287	941,743	1,319,313	+188.6	+17.2
Limestone..... "	3,631,665	3,253,573	3,731,548	3,143,872	+2.8	—3.3
Marble..... "	15,975	85,369	22,866	169,698	+43.2	+98.8
Sandstone..... "	342,824	838,005	285,508	495,856	—16.7	—40.8
Totals, Other Structural Materials.....	—	20,202,837	—	22,299,714	—	+10.4
Totals, Clay Products and Other Structural Materials.....	—	23,215,400	—	25,770,741	—	+11.0
Grand Totals (Canadian Funds).....	—	312,344,457	—	361,919,372	—	+15.9

¹ Not available.

Volume of Mineral Production in Recent Years.—An interesting comparison of the mineral production of the two years 1935 and 1936 is furnished in Table 3.

The percentage increase or decrease in quantity production of the individual minerals is shown in Table 2 above, but, owing to the many different units in which the quantities of different minerals are expressed, the total volume of production from year to year is difficult to compare, while the wide variations in prices make comparisons of total values misleading. Table 3 constitutes an attempt to overcome these difficulties by working out what the values would have been in the later

year if prices had remained the same as in the earlier, thus obtaining the increases or decreases due to changes in quantity alone; these are shown in the last column.

Mineral production in 1936 increased materially when compared with 1935. Table 3 shows that there was an increase of 14.6 p.c. in physical volume. There was a healthy increase in the volume of production in all divisions of the mineral industry, while in the case of non-metallic minerals other than fuels, the gain amounted to no less than 50 p.c. The average price level was slightly lower in all divisions except metallic minerals.

It is interesting to note the uneven influence of the economic disturbances of recent years upon different divisions of the mineral industry. Prior to 1935, production in Canada reached its highest recorded value of \$310,850,000 in 1929. The production of metallic minerals actually expanded further in volume in 1930, and in 1932 was still 3.7 p.c. greater than in 1929. Drastic declines had occurred in the volume of production in other divisions, fuels being reduced 28.9 p.c., other non-metallics 47.8 p.c., clay products 72.1 p.c., and other structural materials 57.6 p.c. compared with 1929. The rapid decline in prices was arrested by 1933 and in that year there was increased volume of production in both metallic and non-metallic minerals, but production declined further in clay products to only 20 p.c. and in other structural materials to only 31 p.c. of their respective volumes in 1929. Since then, there has been improvement in all divisions of the industry. Compared with 1929, the volume of production in 1936 was 60.1 p.c. greater for metallic minerals, 10.1 p.c. smaller for fuels, 9.8 p.c. greater for other non-metallics, 71.1 p.c. smaller for clay products, 49.9 p.c. smaller for other structural materials, and 17.5 p.c. larger for the whole mineral industry. Preliminary figures for 1937 indicate a further considerable growth in the production of metals and a continuation of the recovery in each of the other divisions.

3.—Value of the Mineral Production of Canada in 1936, Compared with 1935, together with the Amounts of the Change Due to Price Fluctuations and Quantity Fluctuations, respectively, by Items.

Item.	Actual Value, 1936.	Value at Prices of 1935.	Actual Value, 1935.	Actual Increase (+) or Decrease (-).	Due to Higher (+) or Lower (-) Prices.	Due to Larger (+) or Smaller (-) Quantities.
	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000
METALLICS.						
Arsenic.....	42	41	75	-33	+1	-34
Bismuth.....	361	350	13	+348	+11	+337
Cadmium.....	699	597	441	+258	+102	+156
Chromite.....	14	11	15	-1	+3	-4
Cobalt.....	805	666	513	+292	+139	+153
Copper.....	39,514	33,682	32,312	+7,202	+5,832	+1,370
Gold.....	77,478	77,478	67,905	+9,573	-	+9,573
Gold exchange equalization.	53,815	54,421	47,691	+6,124	-606	+6,730
Lead.....	14,994	11,495	10,625	+4,369	+3,499	+870
Nickel.....	43,877	44,132	35,345	+8,532	-255	+8,787
Palladium, rhodium, etc....	2,433	2,401	1,963	+520	+82	+438
Platinum.....	5,321	4,302	3,446	+1,875	+1,019	+856
Selenium.....	621	674	703	-82	-53	-29
Silver.....	8,274	11,917	10,767	-2,493	-3,643	+1,150
Tellurium.....	63	71	33	+30	-8	+38
Titanium ore.....	18	18	16	+2	-	+2
Zinc.....	11,045	9,995	9,937	+1,108	+1,050	+58
Other metallics.....	1	2	1	-	-1	+1
Totals, Metallic Minerals.....	259,425	252,253	221,801	+37,624	+7,172	+30,452
Increases, p.c.....	-	-	-	+16.9	+3.2	+13.7

3.—Value of the Mineral Production of Canada in 1936, Compared with 1935, together with the Amounts of the Change Due to Price Fluctuations and Quantity Fluctuations, respectively, by Items—concluded.

Item.	Actual Value, 1936.	Value at Prices of 1935.	Actual Value, 1935.	Actual Increase (+) or Decrease (-).	Due to Higher (+) or Lower (-) Prices.	Due to Larger (+) or Smaller (-) Quantities.
NON-METALLICS.	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000
<i>Fuels.</i>						
Coal	45,792	45,992	41,963	+3,829	-200	+4,029
Natural gas.....	10,762	10,683	9,363	+1,399	+79	+1,320
Petroleum, crude.....	3,422	3,616	3,492	-70	-194	+124
Peat.....	7	6	6	+1	+1	-
Totals, Fuels.....	59,983	60,297	54,824	+5,159	-314	+5,473
Increases or decreases, p.c....	-	-	-	+9.4	-0.6	+10.0
<i>Other Non-Metallic Minerals.</i>						
Asbestos.....	9,958	10,099	7,055	+2,903	-141	+3,044
Diatomite.....	14	25	33	-19	-11	-8
Feldspar.....	154	145	144	+10	+9	+1
Graphite.....	89	92	80	+9	-3	+12
Grindstones.....	25	27	34	-9	-2	-7
Gypsum.....	1,279	1,434	932	+347	-155	+502
Iron oxides.....	70	82	77	-7	-12	+5
Magnetitic dolomite.....	769	701	486	+283	+68	+215
Magnesium sulphate.....	14	15	8	+6	-1	+7
Mica.....	75	112	82	-7	-37	+30
Mineral water.....	19	17	17	+2	+2	-
Nepheline-syenite.....	37	37 ¹	-	+37	-	+37
Quartz.....	598	1,905	425	+1,473	-1,307	+1,480
Salt.....	1,773	2,043	1,881	-108	-270	+162
Silica brick.....	97	94	96	-1	+3	-2
Soapstone.....	33	44	32	+1	-11	+12
Sodium sulphate.....	553	580	344	+209	-27	+236
Sulphur.....	1,033	1,148	634	+399	-115	+514
Talc.....	145	147	139	+6	-2	+8
Other non-metallics.....	5	6	5	-	-1	+1
Totals, Other Non-Metallic Minerals.....	16,740	18,753	12,504	+4,236	-2,013	+6,249
Increases or decreases, p.c....	-	-	-	+33.9	-16.1	+50.0
CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS.						
<i>Clay Products.</i>						
Brick—Soft Mud (face.....	111	107	122	-11	+4	-15
Process common..	303	296	259	+44	+7	+37
Stiff Mud (face.....	576	597	500	+76	-21	+97
Process common..	484	481	437	+47	+3	+44
(wire cut)						
Dry Press (face.....	166	186	175	-9	-20	+11
common..	101	89	55	+46	+12	+34
Fancy or ornamental.....	1	1	1	-	-	-
Sewer brick.....	7	13	5	+2	-6	+8
Fire brick.....	119	126	90	+29	-7	+36
Fireclay and other clay.....	18	18	16	+2	-	+2
Fireclay blocks, etc.....	65	69	71	-6	-4	-2
Hollow blocks.....	468	427	345	+123	+41	+82
Floor tile.....	14	15	8	+6	-1	+7
Drain tile.....	215	235	205	+10	-20	+30
Sewer pipe, copings, etc.....	588	644	482	+106	-56	+162
Pottery—glazed or not.....	218	223	221	-3	-5	+2
Other clay products.....	17	18	20	-3	-1	-2
Totals, Clay Products.....	3,471	3,545	3,012	+459	-74	+533
Increases or decreases, p.c....	-	-	-	+15.2	-2.4	+17.6
<i>Other Structural Materials.</i>						
Cement.....	6,908	6,898	5,580	+1,328	+10	+1,318
Lime.....	3,336	3,382	2,926	+410	-46	+456
Sand and gravel.....	6,921	6,637	6,389	+532	+234	+248
Stone.....	5,135	6,129	5,308	-173	-994	+821
Totals, Other Structural Materials.....	22,300	23,046	20,203	+2,097	-746	+2,843
Increases or decreases, p.c....	-	-	-	+10.4	-3.7	+14.1
Grand Totals.....	361,919	357,894	312,344	+49,575	+4,025	+45,550
Increases, p.c.....	-	-	-	+15.9	+1.3	+14.6

¹Since no production was reported for 1935 the price in that year is assumed to be the same as in 1936 and therefore the increase is entirely due to quantity.

Subsection 2.—Provincial Distribution of Mineral Production.

The principal mineral-producing province of Canada in recent years has been Ontario, which accounted for 51·0 p.c. of the Dominion total in 1936. The rise in the price of gold has been especially favourable to Ontario's mineral production, while the Sudbury nickel-copper deposits are another outstanding feature in the mineral resources of the province. British Columbia holds second place in the value of minerals produced with 15·0 p.c. of the Dominion totals in 1936. The mineral resources of British Columbia are probably more varied than those of any other province, since its production includes most of the important metals as well as substantial quantities of coal. Mineral production in Quebec has increased greatly in the post-war period, accounting for 13·7 p.c. of the total for Canada in 1936. Whereas formerly non-metallics (especially asbestos) and structural materials made up nearly all of its mineral production, more than half the value is now made up of metals, particularly gold and copper. Nova Scotia and Alberta are the most important coal-producing provinces. Manitoba and Saskatchewan, in recent years, have been making a growing contribution to the production of gold, copper, and zinc in the Dominion. The total value of mineral production in each of the provinces for each year since 1911 is given in Table 4.

4.—Mineral Production of Canada, by Provinces, calendar years 1911-37.

NOTE.—Figures for the years 1899-1910, inclusive, will be found at p. 345 of the 1933 Year Book.

Calendar Year.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon. ¹
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1911...	15,409,397	612,830	9,304,717	42,796,162	1,791,772	636,706	6,662,673	21,299,305	4,707,432
1912...	18,922,236	771,004	11,656,998	51,985,876	2,463,074	1,165,642	12,073,589	30,076,635	5,933,242
1913...	19,376,183	1,102,613	13,475,534	59,167,749	2,214,496	881,142	15,054,046	28,086,312	6,276,737
1914...	17,584,639	1,014,570	11,836,929	53,034,677	2,413,489	712,313	12,684,234	24,164,039	5,418,185
1915...	18,088,342	903,467	11,619,275	61,071,287	1,318,387	451,933	9,909,347	23,689,425	5,057,708
1916...	20,042,262	1,118,187	14,406,598	80,461,323	1,823,576	590,473	13,297,543	39,960,962	5,491,610
1917...	21,104,542	1,435,024	17,400,077	89,066,600	2,628,264	860,651	16,527,535	36,141,926	4,482,202
1918...	22,317,108	2,144,017	19,605,347	94,694,093	3,120,600	1,019,781	23,109,987	42,935,333	3,355,631
1919...	23,445,215	1,770,945	21,267,947	67,917,998	2,868,378	1,521,964	21,087,582	34,865,427	1,940,934
1920...	34,130,017	2,491,787	28,886,214	81,715,808	4,223,461	1,837,468	33,586,456	39,411,728	1,576,726
1921...	28,912,111	1,901,505	15,157,094	57,356,651	1,934,117	1,114,220	30,562,229	33,230,460	1,754,955
1922...	25,923,499	2,263,692	17,646,529	65,866,029	2,258,942	1,255,470	27,872,136	39,423,962	1,785,573
1923...	29,648,893	2,462,457	20,308,763	80,825,851	1,768,037	1,047,583	31,287,536	43,757,388	2,972,823
1924...	23,820,352	1,969,260	19,136,504	86,398,656	1,534,249	1,128,100	22,344,940	52,298,533	952,812
1925...	17,625,612	1,743,858	24,284,527	87,980,436	2,276,759	1,076,392	25,318,866	64,485,442	1,791,641
1926...	28,873,792	1,811,104	25,956,193	84,702,296	3,073,528	1,193,394	26,977,027	65,622,976	2,226,813
1927...	30,111,221	2,148,535	28,870,403	89,982,962	2,888,912	1,455,225	29,309,223	60,801,170	1,789,044
1928...	30,524,392	2,198,919	37,037,420	99,584,718	4,186,853	1,719,461	32,531,416	64,496,351	2,709,957
1929...	30,904,453	2,439,072	46,358,285	117,662,505	5,423,825	2,253,506	34,739,986	68,162,878	2,905,736
1930...	27,019,367	2,383,571	41,215,220	113,530,976	5,453,182	2,368,612	30,427,742	54,953,320	2,521,588
1931...	21,081,157	2,176,910	35,964,537	97,975,915	10,057,808	1,931,880	23,580,901	35,480,701	2,184,917
1932...	16,201,279	2,223,505	25,638,466	85,910,030	9,058,365	1,681,728	21,174,061	27,326,173	2,014,618
1933...	16,966,183	2,107,682	28,141,482	110,205,021	9,026,951	2,477,425	19,702,953	30,794,504	2,073,052
1934...	23,310,729	2,156,151	31,269,945	145,565,871	9,776,934	2,977,061	20,228,851	41,206,965	1,669,083
1935...	23,183,128	2,821,027	39,124,696	158,934,269	12,052,417	3,816,943	22,289,681	48,692,050	1,430,246
1936...	26,672,278	2,587,891	49,736,919	184,532,892	11,315,527	6,170,397	23,305,726	54,407,036	2,390,706
1937 ² ...	30,309,665	2,788,439	65,043,971	229,938,108	16,055,743	10,280,180	25,328,640	73,143,717	3,904,797

¹ Includes a production from the Northwest Territories in 1932-37. to revision.

² Figures for 1937 are subject to revision.

The quantities and values of the minerals produced in each province during 1936 are shown in Table 5. This table shows the different minerals which make up the mineral production of each province and also the particular province or provinces which contribute to the production of each mineral in Canada.

5.—Detailed Mineral Production of Canada, by Provinces, calendar year 1936.

NOTE.—The mineral production of Yukon and the Northwest Territories during the calendar year 1936 was as follows, in quantities and values: gold 50,359 fine oz., \$1,764,076 (including premium); lead 2,568,699 lb., \$100,513; silver 1,100,430 fine oz., \$496,591; coal 510 tons, \$2,286; petroleum 5,399 bbl., \$26,995; total, \$2,390,706. Radium and uranium salts were produced in Canada in 1936 from ores mined in the N.W.T., but statistics pertaining to those minerals are not available for publication. For Dominion totals by individual minerals, see Table 2. Dashes in this table indicate that there was no production reported for those provinces.

Mineral.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
METALLICS.								
Arsenic (As ₂ O ₃)..lb.	-	-	-	1,365,606	-	-	-	-
\$	-	-	-	42,491	-	-	-	-
Bismuth.....lb.	-	-	-	3,552	-	-	-	360,613
\$	-	-	-	3,516	-	-	-	357,007
Cadmium.....lb.	-	-	-	-	148,133	111,749	-	526,034
\$	-	-	-	-	131,838	99,457	-	468,170
Chromite.....ton	-	-	545	1	-	-	-	-
\$	-	-	8,508	5,070	-	-	-	-
Cobalt.....lb.	-	-	-	887,591	-	-	-	-
\$	-	-	-	804,676	-	-	-	-
Copper.....lb.	779,307	-	66,340,175	287,914,078	29,853,220	14,971,609	-	21,169,343
\$	73,855	-	6,287,058	26,898,920	2,829,180	1,418,859	-	2,006,219
Gold.....fine oz.	11,960	-	666,905	2,378,503	139,273	48,981	109	451,938
\$	247,235	-	13,786,150	49,168,019	2,879,028	1,012,527	2,253	9,342,387
Estimated exchange equalization on gold produced.....\$	171,724	-	9,575,533	34,150,941	1,999,705	703,277	1,565	6,489,001
Lead.....lb.	1,901,712	-	2,047,689	17,442	-	-	-	376,645,367
\$	74,414	-	80,126	683	-	-	-	14,738,133
Manganese ore..ton	-	221	-	-	-	-	-	-
\$	-	1,596	-	-	-	-	-	-
Nickel.....lb.	-	-	-	169,739,393	-	-	-	-
\$	-	-	-	43,876,525	-	-	-	-
Palladium, rhodium, iridium, etc.....fine oz.	-	-	-	103,671	-	-	-	-
\$	-	-	-	2,483,075	-	-	-	-
Platinum...fine oz.	-	-	-	131,551	-	-	-	20
\$	-	-	-	5,319,922	-	-	-	809
Selenium.....lb.	-	-	168,417	106,300	50,760	25,380	-	-
\$	-	-	298,098	188,151	89,845	44,923	-	-
Silver.....fine oz.	107,642	-	724,339	5,219,366	791,489	642,497	9	9,748,715
\$	48,576	-	326,872	2,355,343	357,175	289,940	4	4,399,303
Tellurium.....lb.	-	-	19,502	10,197	3,928	1,964	-	-
\$	-	-	34,519	18,049	6,953	3,476	-	-
Titanium ore..ton	-	-	2,566	-	-	-	-	-
\$	-	-	18,318	-	-	-	-	-
Zinc.....lb.	6,180,219	-	6,896,123	-	36,744,951	27,692,869	-	255,668,574
\$	204,874	-	228,606	-	1,218,095	918,019	-	8,475,413
Totals, Metals.....\$	820,678	1,596	30,643,788	165,315,381	9,511,829	4,490,478	3,822	16,276,442
NON-METALLICS.								
<i>Fuels.</i>								
Coal.....ton	6,649,102	368,618	-	-	4,029	1,020,792	5,696,960	1,489,171
\$	22,973,281	1,190,032	-	-	9,525	1,463,680	14,659,705	5,493,425
Natural gas M cu.ft	-	606,246	-	10,006,743	600	90,839	17,407,820	-
\$	-	298,819	-	6,052,294	180	33,985	4,376,720	-
Peat.....ton	-	-	45	1,296	-	-	-	-
\$	-	-	255	7,121	-	-	-	-
Petroleum, crude.....bbl.	-	17,112	-	165,495	-	-	1,312,368	-
\$	-	24,075	-	350,767	-	-	3,019,930	-
Totals, Fuels...\$	22,973,281	1,512,926	255	6,410,182	9,705	1,497,665	22,056,355	5,493,425
<i>Other Non-Metallics.</i>								
Asbestos.....ton	-	-	301,287	-	-	-	-	-
\$	-	-	958,183	-	-	-	-	-

¹ Not available.

5.—Detailed Mineral Production of Canada, by Provinces, calendar year 1936—con.

Mineral.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
<i>Other Non-Metallics—concluded.</i>								
Diatomite.....ton	565	—	—	40	—	—	—	10
\$	11,300	—	—	2,000	—	—	—	350
Feldspar.....ton	—	—	8,115	8,409	1,322	—	—	—
\$	—	—	75,703	70,840	7,932	—	—	—
Fluorspar.....ton	—	—	—	75	—	—	—	—
\$	—	—	—	900	—	—	—	—
Graphite.....ton	—	—	—	1	—	—	—	—
\$	—	—	—	88,812	—	—	—	—
Grindstones (includes pulpstones, etc.). ton	70	412	—	—	—	—	—	87
\$	2,242	17,982	—	—	—	—	—	4,500
Gypsum.....ton	729,019	38,470	—	40,191	12,064	—	—	14,078
\$	808,294	123,560	—	182,783	87,076	—	—	77,258
Iron oxides (ochre).....ton	—	—	5,458	—	—	—	—	396
\$	—	—	65,630	—	—	—	—	4,000
Magnesian dolomite.....\$	—	—	768,742	—	—	—	—	—
Magnesium sulphate.....ton	—	—	—	—	—	—	—	654
\$	—	—	—	—	—	—	—	13,712
Mica.....lb.	—	—	544,214	1,057,343	—	—	—	—
\$	—	—	63,123	11,433	—	—	—	—
Mineral waters. Imp. gal.	—	—	131,186	23,100	—	—	—	—
\$	—	—	17,399	1,117	—	—	—	—
Nepheline-syenite.....\$	—	—	—	37,426	—	—	—	—
Phosphate.....ton	—	—	525	—	—	—	—	—
\$	—	—	4,927	—	—	—	—	—
Quartz.....ton	6,764	—	78,975	884,585	90	76,089	—	146
\$	10,819	—	320,634	216,037	45	49,458	—	788
Salt.....ton	38,774	—	—	350,044	2,498	—	—	—
\$	183,915	—	—	1,557,078	32,151	—	—	—
Silica brick.... M	1,922	—	—	471	—	—	—	—
\$	70,570	—	—	26,715	—	—	—	—
Soapstone.....\$	—	—	32,770	—	—	—	—	—
Sodium carbonate.....ton	—	—	—	—	—	—	—	192
\$	—	—	—	—	—	—	—	1,677
Sodium sulphate.....ton	—	—	—	—	—	75,598	—	—
\$	—	—	—	—	—	552,681	—	—
Sulphur ²ton	—	—	43,084	14,152	—	—	—	64,896
\$	—	—	282,743	141,520	—	—	—	608,792
Talc.....ton	—	—	—	14,461	—	—	—	47
\$	—	—	—	143,701	—	—	—	799
Totals, Other Non-Metallics. \$	1,087,140	141,542	11,589,854	2,480,362	127,204	602,139	—	711,876
Totals, Non-Metallics..... \$	24,060,421	1,654,468	11,590,109	8,890,544	136,909	2,099,804	22,056,355	6,205,301
CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS.								
<i>Clay Products.</i>								
Brick—								
Soft Mud Process—								
Face..... M	676	—	215	4,914	—	—	58	234
\$	14,026	—	2,363	84,210	—	—	1,332	9,447
Common...M	4,546	1,477	2,482	8,443	2,639	—	2,504	2,089
\$	52,702	20,653	22,057	113,088	40,958	—	23,928	29,304

¹ Not available.² Sulphur content of pyrites shipped and estimated sulphur contained in sulphuric acid made from waste smelter gases.

5.—Detailed Mineral Production of Canada, by Provinces, calendar year 1936—concl.

Mineral.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
<i>Clay Products—concluded.</i>								
Brick—concluded.								
Stiff Mud Process (wire cut)—								
Face..... M	53	128	9,803	19,271	283	355	13	312
\$	901	3,188	191,085	352,053	7,012	11,834	227	9,465
Common.. M	696	658	18,922	13,644	-	324	110	1,238
\$	8,379	8,279	248,647	197,475	-	3,385	780	17,133
Dry Press—								
Face..... M	-	-	2,161	5,341	-	87	1,372	-
\$	-	-	52,096	95,755	-	3,746	14,327	-
Common.. M	-	-	-	3,906	-	11	6,324	-
\$	-	-	-	57,079	-	210	43,496	-
Fancy or ornamental brick..... M	-	-	-	24	-	-	1	-
\$	-	-	-	1,295	-	-	79	-
Sewer brick. M	-	-	-	416	-	-	-	2
\$	-	-	-	6,723	-	-	-	55
Paving brick M	-	-	-	-	-	-	100	16
\$	-	-	-	-	-	-	2,503	646
Firebrick.... M	6	-	-	-	-	395	14	2,133
\$	210	-	-	-	-	19,676	755	98,282
Fireclay..... ton	1,214	35	-	-	-	621	-	567
\$	3,902	1,415	-	-	-	4,665	-	7,657
Fireclay blocks and shapes.... \$	471	894	-	-	-	46,968	-	16,838
Tile—								
Hollow blocks..... ton	4,058	332	16,786	30,085	377	500	3,022	3,341
\$	39,990	2,828	135,144	223,545	3,903	5,100	24,504	32,846
Roofing tile. No.	-	-	-	43,600	-	-	-	9,130
\$	-	-	-	1,856	-	-	-	283
Floor tile (quarries) sq. ft.	-	-	-	95,540	-	-	-	2,198
\$	-	-	-	13,484	-	-	-	314
Drain tile... M	135	771	438	6,000	64	-	27	713
\$	3,676	35,392	13,714	131,041	3,691	-	1,751	25,325
Sewer pipe, copings, flue linings, etc..... \$	230,130	-	26,659	235,238	-	-	67,604	28,854
Pottery, glazed or unglazed.. \$	-	29,529	-	51,507	-	-	134,491	2,875
Bentonite..... ton	-	-	-	-	-	-	-	120
\$	-	-	-	-	-	-	-	180
Other clay products..... \$	867	78	-	9,587	-	-	-	1,387
Totals, Clay Products.... \$	355,254	102,256	691,765	1,573,936	55,564	95,584	315,777	280,891
<i>Other Structural Materials.</i>								
Cement..... bbl.	-	-	2,093,130	1,542,463	348,042	-	243,534	281,549
\$	-	-	2,945,074	2,180,895	783,095	-	452,197	516,931
Lime..... ton	15,664	17,842	133,254	246,593	21,760	-	9,129	24,159
\$	119,230	128,016	718,585	1,946,060	211,035	-	78,259	134,785
Sand and gravel..... ton	1,947,471 ¹	970,945	5,490,280	8,498,153	1,852,606	716,910	894,380	1,753,415
\$	941,366 ¹	567,797	1,418,231	2,227,620	545,130	284,531	339,928	596,796
Slate..... ton	-	-	803	260	-	-	-	184
\$	-	-	855	2,080	-	-	-	2,479
Stone..... ton	254,572	59,431	1,513,249	2,706,420	49,506	-	13,916	384,571
\$	375,329	133,758	1,728,512	2,306,376	71,965	-	29,388	393,411
Totals, Other Structural Materials.... \$	1,435,925	829,571	6,811,257	8,753,031	1,611,225	284,531	929,772	1,644,402
Totals, Clay Products and Other Structural Materials.... \$	1,791,179	931,827	7,503,022	10,326,967	1,666,789	380,115	1,245,549	1,925,293
Grand Totals (Canadian Funds)..... \$	26,672,278	2,587,891	49,736,919	184,532,892	11,315,527	6,970,397	23,305,726	54,407,036

¹ Includes 17,975 tons valued at \$2,663 from Prince Edward Island.

Section 3.—Industrial Statistics of Mines and Minerals— Capital, Labour, Wages, etc., in Principal Industries.

Annual statistical reports on the mineral production of Canada have been published for many years, first by the Geological Survey, later by the Mines Branch of the Department of Mines, and, since 1921, by the Dominion Bureau of Statistics. Prior to that year the annual statistics of mines were confined chiefly to a presentation of the quantity production of each of the minerals and their value at average market prices for the year. The scope of the statistics now includes a general review of the principal mineral industries, such as the copper-gold, silver-lead-zinc, and nickel-copper industries, as well as a section on metallurgical works. The additional data include such features as capital employed, numbers of employees, wages and salaries paid, and net value of sales, while for 1934 and 1935 there was added a special survey of expenditures for equipment, supplies, freight, and insurance by the mining industry. The aim has been to extend the mining statistics beyond a summary of the production of individual minerals, by approaching the subject from the standpoint of industrial organization, definitely illustrating the place which mining holds in the scheme of Canadian productive enterprise.

A new figure "net income from sales" has been introduced since 1935 in accordance with a recommendation adopted by the Conference of Commonwealth Statisticians in Ottawa in 1935. The net income from sales is obtained by deducting the cost of fuel, electricity, and consumable supplies (explosives, lubricants, chemicals, etc.), consumed in the production process, from the net sales. In view of the fact that statistics of process supplies were not collected prior to 1935, it is impossible to present statistics of net income from sales for previous years comparable to this new figure beginning in 1935.

The net sales of the metallic industries given in Tables 6 and 7 are those reported by the operating companies, and are in each case the settlements received for shipments by mine operators and the additional values obtained when the smelting of these ores is completed in Canada. The totals indicate more nearly the actual return to the different industries than do the values for the several metals in Table 2 of this chapter, where, in the cases of copper, lead, zinc, and silver, the values are computed by applying the average prices for the year in the principal metal markets to the total production from mines and smelters with no reduction for stocks unsold at the end of the year. Some imported ores and concentrates are treated in Canadian non-ferrous smelting and refining works. The net sales of these plants include, therefore, the net value of the metals recovered from these imported ores and to this extent the net sales shown in Tables 6 and 7 include products not of Canadian origin.

The net sales of the fuel industries in Table 7 are less than the total production of fuels in Table 2, because the net sales are confined to products for which the operators receive some economic return, while the production of the fuel commodities includes all of those commodities produced, whether the producer actually receives payment in any form for them or not. Thus in coal mining, the industrial values in Table 7 include only coal sold, supplied to employees for domestic consumption, or used in making coke and briquettes, whereas the figures of coal production as shown in Table 2 include, in addition to the above, coal consumed for power and other purposes in the coal-mining operations and also the difference between coal put on the bank and lifted from the bank. Petroleum producers have a larger

monetary return than the actual value of the petroleum produced because many oil wells also produce large quantities of natural gas. On the other hand, the natural gas industry receives a smaller return than the total value of all natural gas produced because some of the gas is produced by the petroleum industry, because of leakage or other loss in piping gas to the consumers, and because a small amount of natural gas is produced by private individuals or groups from their own wells for their own consumption, without any industrial organization intervening between producer and consumer.

For other non-metallic minerals (if the small production of peat normally included with fuels is deducted) and clay products and structural materials, the sales of the producing industries are the same in each case as the total value of the mineral commodities produced.

Subsection 1.—Principal Factors in the Mineral Industries.

Capital.—In connection with the item of capital, operators are requested to report *only the capital actually invested in the enterprises*, including: (1) present value of lands, buildings, plant, machinery, and tools; (2) cost of materials on hand, supplies, finished products, and ore on dump; and (3) cash, trading and operating accounts, and bills receivable. It should be specially noted that no estimate of ore reserves is included in the capital. Indeed, capital expenditures in mining ventures are frequently very difficult to designate. For instance, purely exploratory workings might properly be charged to current expenses, but if these exploratory workings open up new ore resources and become the channel by which such ore is utilized, such workings become part of the productive plant and as such their cost is an item of capital. On the other hand, after an ore body is exhausted, much of the mining plant has practically no resale value and, for this reason, many companies drastically write off the capital value of their plant during profitable years of operation. In these circumstances, the actual amount of capital employed in mining enterprises is uncertain and the figures of capital given in Tables 6 and 7 should be used with such reservations in mind.

Employees.—Tables 6 and 7 below also show the numbers of persons directly employed in the operating mineral industries. These figures, however, do not include those engaged in prospecting and exploration for individuals or small syndicates from whom no returns can be obtained, amounting probably in the aggregate to a considerable number. Neither do the figures include consulting geologists and mining engineers nor contract diamond drillers and their respective organizations.

Commodities and Services Purchased.—In addition to the expenditures for remuneration of those directly employed in the mineral industries, statistics are collected annually of expenditures for fuel and electricity, but the figures prior to 1935 given in Tables 6 and 7 are exclusive of the fuel and electricity used in metallurgical processes, such as reduction furnaces, electrolytic cells, etc. The mining industry expends annually large additional sums for the purchase of equipment, machinery, explosives, and a great variety of other supplies, and for freight and insurance. In a special investigation to obtain an estimate of these expenditures, firms engaged in the industry were circularized regarding such expenditures in 1934 and 1935. Returns received covered fairly completely the operating firms in the metal-mining and fuel industries, but in the other groups of mineral industries, where there are many small operators of gravel pits, small quarries, etc., the re-

turns were much less complete. Furthermore, no attempt was made to reach prospectors and small development parties whose expenditures in the aggregate, with so much exploratory activity as exists at present, would amount to a large sum. The figures resulting from these surveys* must, therefore, be regarded as suggestive rather than by any means comprehensive. In 1935, the reported expenditures amounted to almost \$85,000,000, of which freight and express made up 14.7 p.c.; electric power, 12.6 p.c.; fuel and lubricants, 11.7 p.c.; timber and building materials, 7.8 p.c.; explosives, 6.5 p.c.; insurance, 6.0 p.c.; and the remaining 40 p.c. consisted of a great variety of purchases such as machinery and tools, railway equipment, electrical equipment, motor vehicles, rubber goods, chemicals, pipe, etc. The metal mines and smelters accounted for 77.7 p.c. of the expenditures and coal mines for 11.1 p.c. These expenditures were shown by commodity items, by industries, and by provinces at p. 356 of the 1937 Year Book.

Subsection 2.—Growth of the Mining Industry in Recent Years.

Growth, 1922-29.—From 1922 to 1929, the output of the mineral industries increased by 72 p.c., capital investment by 76 p.c., employment by 53 p.c., and the salaries and wages by 65 p.c. Progress was most rapid in the metallic mineral industries, where the expansion in net production amounted to 170 p.c. with proportionate increases in capital and employment. The period from 1922 to 1929 was marked by a rising cycle of activity in construction. This was reflected in the expansion of industries engaged in the production of clay products and other structural materials. The output of this group of industries increased by 47 p.c. during the period, while, within the group, progress was much greater in industries producing cement, gravel, and stone than in the clay products industries. The group of non-metallic mineral industries remained relatively stationary in contrast to the other two main groups during this period of rapid expansion. This may be attributed to the fact that coal mining is the predominant industry in the non-metallic group and, under increasing competition from oil fuels and hydro-electric power, did not participate in the general industrial expansion of the period.

Developments Since 1929.—Following 1929 the mining industry in Canada was affected for some years by the world-wide economic disturbances and by a very drastic decline in the prices of most of the principal metals, especially copper, lead, zinc, and silver. In the case of gold, on the other hand, since 1931 the price has risen to a level about 69 p.c. above that formerly prevailing. Under the influence of the early decline in base-metal prices, the value of the net production of the metallic mineral industries declined by 27 p.c. from 1929 to 1932, with a decline of 29 p.c. in employees and 30 p.c. in salaries and wages paid. But, since the higher price for gold stimulated its production and the readjustment of costs stabilized the base-metal industries, metal production has expanded again, and while the net sales in 1936 were not comparable with those of 1929, employees were 49.3 p.c. above, and salaries and wages 43.3 p.c. above 1929. While industrial statistics for 1937 are not yet available, the production figures for this latest year indicate a continued rapid growth in metal production.

Among the non-metallic industries the demand for coal declined during the depression years owing to reduced requirements in industrial and transportation

* The results of these surveys are given in the "Special Report on the Consumption of Supplies by the Canadian Mining Industry" for 1934 and 1935, published by and obtainable from the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics.

activities. Similarly, the demand for asbestos and gypsum was affected by the lower level of industrial and construction operations. Salt was an exception to the general rule, as its production was well maintained throughout, partly owing to its increased consumption in certain chemical industries. Indeed, the net sales of the salt-producing industry increased each year from 1929 to 1932 to a level about 23 p.c. above that of 1929. A large measure of recovery has taken place in this group of industries, especially in the production of non-metallic minerals other than fuels.

The production of clay products and other structural materials is directly dependent upon construction activities within Canada. During the early years of the depression, these activities were partly maintained by governmental relief projects and by the carrying to completion of some large operations which had commenced before 1930. As a result, construction reached its lowest level in Canada during 1933, and the group of industries producing clay products and other structural materials was at a lower level of operation in that year than in any other year recorded since 1921. From 1929 to 1933 there was a decline of 71 p.c. in net sales, 69 p.c. in employees, 74 p.c. in salaries and wages and 76 p.c. in expenditures for fuel and electricity, a large item in the cost of production in these industries. However, construction has been more active in Canada since 1933 (see Chapter XV) and this increased activity has been accompanied by a welcome change to a rising trend in the production of clay products and other structural materials, although these industries are still at a low level compared with their activity prior to 1929.

6.—Summary of the Principal Statistics of the Mineral Industries in Canada, by Groups, 1929-36, and by Provinces, 1936.

NOTE.—For the years 1921-28, see the 1936 Year Book, pp. 355-356. In the past, the net value of production, called "net sales", in these industries has been gross sales less freight and treatment charges in the case of mines, and less the value of ores charged in the case of smelters. According to a recommendation adopted by the Conference of Commonwealth Statisticians in Ottawa, 1935, the net figure, called the "net income from sales", is now obtained from net sales as defined above by a further deduction of the costs of fuel, electricity, and consumable supplies used in the production process. In the table below, however, to facilitate comparison with previous years, figures for 1935 are given to show deductions and resultant net by both methods, and figures for 1936 on the new basis only.

Group and Year.	Plants or Mines.	Capital Employed.	Employees.	Salaries and Wages.	Fuel and Electricity for Heat and Power. ¹	Net Sales. ²
	No.	\$	No.	\$	\$	\$
METALLIC MINERALS.						
1929.....	528	427,498,173	31,125	50,279,511	11,221,987	163,050,366
1930.....	352	427,439,265	30,623	48,851,303	11,323,313	137,015,892
1931.....	327	390,908,034	25,434	41,829,288	10,340,523	132,382,514
1932.....	330	269,180,464	21,931	34,983,704	8,551,463	119,790,072
1933.....	402	406,998,952	25,443	37,937,871	7,084,253	150,145,926
1934.....	636	465,583,818	34,143	50,818,448	9,144,600	186,785,532
1935.....	619	437,471,769	38,603	59,528,350	10,199,214	217,353,515
1936.....	867	507,796,987	46,455	72,016,670	151,846,099 ³ 188,372,443 ³	173,588,815 ³ 211,444,303 ³
NON-METALLIC MINERALS.						
1929.....	5,494	317,302,496	40,080	55,602,313	6,033,773	93,596,188
1930.....	5,191	328,776,596	38,355	47,852,675	5,785,483	80,063,355
1931.....	5,374	325,168,359	34,075	36,031,233	4,870,674	61,629,210
1932.....	5,246	302,294,837	31,654	29,918,319	4,497,602	54,389,856
1933.....	5,327	283,796,783	30,532	27,309,607	4,695,254	54,912,205
1934.....	5,605	263,120,280	32,195	31,763,492	5,219,565	60,580,554
1935.....	6,181	244,237,709	32,755	33,150,704	5,152,971	62,407,314
1936.....	6,224	257,057,806	34,768	37,280,814	16,705,125 ¹ 12,270,765 ¹	45,739,144 ³ 59,475,472 ³

For footnotes, see end of Table, p. 356.

6.—Summary of the Principal Statistics of the Mineral Industries in Canada, by Groups, 1929-36, and by Provinces, 1936—concluded.

Group, Year and Province	Plants or Mines.	Capital Employed.	Employees.	Salaries and Wages.	Fuel and Electricity for Heat and Power. ¹	Net Sales. ²
	No.	\$	No.	\$	\$	\$
CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS.						
1929.....	3,126	122,220,364	23,897	18,608,687	9,495,825	58,534,834
1930.....	3,562	131,204,998	20,222	17,271,354	7,957,397	53,727,465
1931.....	3,877	125,983,627	13,300	14,108,778	6,298,151	44,158,295
1932.....	4,804	113,736,272	7,885	6,870,026	3,427,419	22,398,283
1933.....	5,144	109,496,612	7,359	4,784,327	2,245,397	16,696,687
1934.....	5,411	102,319,089	7,167	5,544,246	2,838,327	19,286,761
1935.....	6,098	95,790,621	8,898	7,401,505	3,004,647	23,215,400
1936.....	6,138	94,208,302	9,776	7,468,738	3,962,091 ¹	19,253,309 ³
					4,718,167 ¹	21,052,574 ³
Grand Totals, Mineral Industries—						
1929.....	9,148	867,021,033	95,102	124,490,511	26,751,585	315,181,388
1930.....	9,105	887,420,859	89,200	113,975,332	25,066,193	270,806,712
1931.....	9,578	842,060,020	72,809	91,969,299	21,509,348	238,170,019
1932.....	10,380	685,211,573	61,470	71,772,049	16,476,484	196,578,211
1933.....	10,873	800,292,347	63,334	70,031,805	14,024,904	221,754,818
1934.....	11,652	831,023,187	73,505	88,126,186	17,202,492	266,652,847
1935.....	12,898	777,500,099	80,256	100,080,559	18,356,832	302,976,229
1936.....	13,229	859,063,095	90,999	116,766,222	172,513,315 ¹	238,581,268 ³
1936.					205,361,375 ¹	291,972,349 ³
Nova Scotia.....	365	55,513,999	15,368	15,980,687	5,645,436 ¹	19,136,304 ³
New Brunswick.....	423	5,253,829	1,744	1,248,431	242,114 ¹	2,324,747 ³
Quebec.....	4,011	140,537,708	14,225	15,774,362	48,436,965 ¹	344,823,557 ³
Ontario.....	6,296	384,535,666	31,105	46,899,805	108,353,709 ¹	151,874,462 ³
Manitoba.....	274	41,722,791	2,932	3,752,367	7,307,942 ¹	9,366,496 ³
Saskatchewan.....	219	14,974,371	1,828	1,937,825	3,826,763 ¹	5,720,747 ³
Alberta.....	594	104,118,831	10,376	11,850,463	2,357,005 ¹	20,104,417 ³
British Columbia.....	1,029	103,483,250	12,827	17,908,553	28,554,615 ¹	36,694,755 ³
Yukon and N.W.T.....	18	8,922,650	594	1,413,729	636,826 ¹	1,926,864 ³

¹ Exclusive of fuel and electricity used in metallurgical processes, except for the footnoted figures for 1935 and 1936, which include all fuel and electricity (whether for metallurgical processes or not) and also the cost of consumable supplies. ² See headnote. ³ This is "net income from sales". See headnote to table, p. 355.

Subsection 3.—The Principal Mineral Industries.

A summary of the industrial statistics of the principal mineral industries operating in Canada in 1935 and 1936 is presented in Table 7. Coal mining has the largest labour force but is being rapidly overtaken by gold mining. Employment in the latter industry is, however, much less subject to seasonal fluctuations and its expenditures on salaries and wages are considerably greater than those of the coal-mining industry. The smelting and refining industry was third in the number of its employees and in salaries and wages paid.

7.—Summary of the Principal Statistics of the Mineral Industries of Canada, by Industries, 1935 and 1936.

NOTE.—See headnote to Table 6, p. 355.

Industry and Year.	Plants or Mines.	Capital Employed.	Employees.	Salaries and Wages.	Purchased Fuel, Electricity, and Consumable Supplies.	Net Income from Sales. ¹
	No.	\$	No.	\$	\$	\$
METALLIC MINERALS.						
Alluvial gold.....1935	86	9,198,533	702	1,227,971	91,737 ²	2,106,025
1936	85	10,965,524	853	1,519,659	167,577	2,893,981
Auriferous quartz.....1935	384	193,728,802	19,834	31,523,907	16,594,031 ²	75,120,774
1936	607	256,018,578	25,097	39,826,742	19,882,784	88,210,233
Copper-gold-silver.....1935	18	38,461,682	3,430	5,040,196	3,433,284 ²	13,243,163
1936	27	40,732,717	3,738	5,473,325	3,652,068	15,619,897
Silver-cobalt.....1935	28	6,380,731	402	494,791	246,218 ²	2,070,716
1936	25	5,946,702	363	458,546	181,592	915,376
Silver-lead-zinc.....1935	70	16,596,941	1,657	2,431,110	1,205,822 ²	10,553,086
1936	89	19,372,600	1,870	2,917,832	1,894,495	13,814,645
Nickel-copper.....1935	7	26,685,284	3,552	6,059,407	3,461,632 ²	11,030,621
1936	9	30,131,192	4,406	7,331,542	4,102,807	18,710,379
Miscellaneous metals....1935	12	733,497	82	63,612	9,300 ²	22,847
1936	11	770,957	113	142,974	30,345	8,147
Smelting and refining...1935	14	145,686,299	8,944	12,687,356	126,804,075 ²	59,441,583
1936	14	143,858,717	10,015	14,346,050	158,460,775	71,276,645
Totals, Metallic Minerals.....1935	619	437,471,769	38,603	59,528,350	151,846,099²	173,588,815
1936	867	507,796,987	46,455	72,016,670	188,372,443	211,444,303
NON-METALLIC MINERALS.						
<i>Fuels.</i>						
Coal.....1935	556	110,516,517	26,198	26,595,344	12,851,633 ²	26,894,671
1936	553	109,703,043	26,918	28,873,135	8,088,154	34,852,621
Natural gas.....1935	3,190	69,221,051	1,719	1,932,937	215,918 ²	6,580,061
1936	3,253	77,666,568	2,075	2,456,918	79,034	9,062,657
Petroleum.....1935	2,285	33,398,894	940	1,046,046	808,500 ²	3,217,927
1936	2,266	33,289,876	1,052	1,298,592	510,016	3,439,317
Totals, Fuels.....1935	6,031	213,136,462	23,857	29,574,327	13,876,051²	36,692,659
1936	6,072	220,659,487	30,045	32,628,645	8,677,204	47,354,595
<i>Other Non-Metallic Minerals.</i>						
Abrasives (natural)....1935	9	114,114	42	25,135	6,326 ²	60,824
1936	8	77,279	30	17,442	3,528	34,846
Asbestos.....1935	9	16,805,583	2,072	1,904,053	2,058,451 ²	4,996,163
1936	11	18,877,326	2,647	2,642,924	2,399,475	7,558,708
Feldspar and quartz....1935	28	1,151,986	260	182,792	58,012 ²	511,200
1936	34	1,400,024	324	238,848	160,913	628,769
Gypsum.....1935	13	5,737,114	467	367,007	187,027 ²	745,176
1936	14	8,954,654	514	440,297	218,869	1,060,102
Iron oxides.....1935	5	175,935	32	26,748	12,264 ²	64,836
1936	6	167,499	39	50,281	11,419	58,211
Mica.....1935	24	145,557	92	45,217	695 ²	81,343
1936	22	221,800	101	44,550	4,824	69,732
Salt.....1935	10	3,776,333	473	597,785	213,940 ²	1,667,038
1936	9	3,856,187	506	640,644	212,697	1,560,447
Talc and soapstone....1935	8	639,501	94	69,803	37,411 ²	134,121
1936	7	647,929	85	70,935	33,392	143,878
Miscellaneous ³1935	44	2,555,124	366	357,837	254,948 ²	785,784
1936	41	2,195,621	477	526,248	548,444	1,006,184
Totals, Other Non-Metallic Minerals.....1935	150	31,101,247	3,898	3,576,377	2,829,074²	9,046,485
1936	152	36,398,319	4,723	4,652,169	3,593,561	12,120,877
Totals, Non-Metallic Minerals.....1935	6,181	244,237,709	32,755	33,150,704	16,705,125²	45,739,144
1936	6,224	257,057,806	34,768	37,280,814	12,270,765	59,475,472

For footnotes, see end of table, p. 358.

7.—Summary of the Principal Statistics of the Mineral Industries of Canada, by Industries, 1935 and 1936—concluded.

Industry and Year.	Plants or Mines.	Capital Employed.	Employees.	Salaries and Wages.	Purchased Fuel, Electricity, and Consumable Supplies.	Net Income from Sales. ¹
	No.	\$	No.	\$	\$	\$
CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS.						
<i>Clay Products.</i>						
Brick, tile and sewer pipe.....1935	136	20,144,431	1,609	1,293,159	666,163 ²	2,127,241
1936	136	19,487,227	1,651	1,397,395	747,183	2,506,008
Stoneware and pottery..1935	3	357,575	119	94,765	13,415 ²	205,744
1936	4	376,204	124	100,753	19,171	198,665
Totals, Clay Products.....1935	139	20,502,006	1,728	1,387,924	679,578 ²	2,332,985
1936	140	19,863,431	1,775	1,498,148	766,354	2,704,673
<i>Other Structural Materials.</i>						
Cement.....1935	9	52,454,004	924	1,027,416	1,621,674 ²	3,958,369
1936	9	53,343,991	1,052	1,196,664	2,169,071	4,739,121
Lime.....1935	54	5,707,391	756	556,049	810,437 ²	2,115,354
1936	57	6,106,901	799	640,322	839,979	2,495,991
Sand and gravel.....1935	5,400	4,849,702	3,015	2,479,418	116,063 ²	6,273,377
1936	5,374	2,994,127	3,638	2,090,388	101,059	6,820,340
Stone.....1935	496	12,277,518	2,475	1,950,698	734,339 ²	4,573,224
1936	558	11,899,852	2,512	2,043,216	841,704	4,292,449
Totals, Other Struc- tural Materials....1935	5,959	75,288,615	7,170	6,013,581	3,282,513 ²	16,920,324
1936	5,998	74,344,871	8,001	5,970,590	3,951,813	18,347,901
Totals, Clay Products and Structural Materials.....1935	6,098	95,790,621	8,898	7,401,505	3,962,091²	19,253,309
1936	6,138	94,208,302	9,776	7,468,738	4,718,167	21,052,574
Grand Totals, Min- eral Industries...1935	12,898	777,500,099	80,256	100,080,559	172,513,315²	238,581,268
1936	13,229	859,063,095	99,099	116,766,222	205,361,375	291,972,349

¹See headnote to Table 6, p. 355. ²Revised since publication of the 1937 Year Book.

a small production of peat, normally included in fuels.

³Includes

Section 4.—Production of Metallic Minerals.

Subsection 1.—Gold.

Canada has been a gold-producing country for over 75 years. During the last half of the 19th century production was chiefly from placer operations in British Columbia and Yukon, while during the present century there has been a rapid growth of production from lode mining both of auriferous quartz and of gold in association with other metals. Gold production in Canada attained its earlier maximum in 1900, when the Yukon production reached its highest point and 1,350,057 fine oz. of gold were produced. The quantities and values of gold produced in Canada are given by provinces for 1911 and subsequent years in Tables 8 and 9. The official estimate for 1937 is 4,095,872 fine oz.

In 1931 the value of gold produced in Canada exceeded that of coal for the first time. Producers of gold have benefited in recent years not only from the general decline in the prices of other commodities, with a consequent reduction in their

operating costs, but also from the rise in the world price of gold itself. Under the stimulus of higher prices, prospecting for gold has been more active during recent years than ever before. Favourable results from these activities, with new mines coming into production and expansion in numerous producing mines, give every prospect for a continued increase in gold production.

Nova Scotia.—Gold was discovered in Nova Scotia in 1860. Two years after the discovery, gold valued at nearly \$142,000 was recovered from the quartz veins; an annual output has been reported since that time. Since 1933, gold-mining activities have been more widespread with the industry showing signs of a general revival.

Quebec.—Although Quebec produced gold as early as 1823, production consisted only of the small quantities recovered in the treatment of the lead and zinc ores of the Notre-Dame-des-Anges district and from the gravels of the Chaudière river. Important discoveries of copper-gold deposits, however, were more recently made at Rouyn, in the northwestern part of the province, adjacent to the Kirkland Lake district of Ontario. Smelting facilities became available for this region as the result of the opening of the Noranda smelter in December, 1927. The operation of this smelter, together with the development of gold properties in the northwestern part of the province, has established Quebec as the second largest gold-producing province. An important source is the copper-gold ores of the Noranda mine, but there is now a rapidly expanding production from auriferous-quartz properties operating in the same general section of the province.

Ontario.—Although gold was first discovered in 1866 in Hastings County and was later found and worked at points from there to the Lake of the Woods in the west, a distance of roughly 900 miles, no permanent gold-mining industry was established until 1911, when the Porcupine Camp was opened up. Soon afterwards the discovery of gold in the Kirkland Lake area, on what is now the Wright-Hargreaves mine, led to the development of this second camp. The Lake Shore mine in this camp has latterly had a larger production than that of any other Canadian gold mine. Active prospecting and development have been carried on during recent years in a number of Precambrian areas in Ontario. In addition to Porcupine and Kirkland Lake, producing mines are now established in the Michipicoten district, in the district east of lake Nipigon, at Matachewan, at Larder Lake, and in the district of Patricia and other northwestern parts of the province.

Manitoba.—The presence of gold-bearing ores in Manitoba has been known since before the War but continuous production is a post-war attainment. The major part of the gold of the province is produced as a by-product from the Flin Flon smelter which treats copper-zinc ores. However, an expanding production is coming from auriferous-quartz operations in the Rice Lake and Beresford Lake areas east of lake Winnipeg and the newer Gods Lake area in the northeastern part of the province.

British Columbia.—The discovery of gold in paying quantities was an epoch-making event in the history of British Columbia. In the late '50's, alluvial gold was discovered along the Thompson river and in 1858 the famous Fraser River rush took place. The extraordinarily rich deposits of Williams and Lightning creeks, in the Cariboo district, were discovered in 1860 and three years later the area had a production of alluvial gold valued at \$4,000,000. In the northern part of the province, the Atlin division of the Cassiar district was prospected in 1892. Then the introduction of lode mining resulted in a rapidly increasing production. The

copper-gold ores of the Rossland and Yale Boundary districts, of the Britannia mine on Howe sound, of mines in the Anyox section and the ores of the Premier mine on the Portland canal were largely responsible for the gold from lode mining which reached its highest pre-war peak with 297,459 fine oz. in 1913. As a result of the higher price of gold, production in the province has recovered from 160,069 fine oz. in 1931 to the estimate for 1937 of 503,403 fine oz. The mines of the Bridge River district, including the Pioneer, Bralorne and others, are contributing to this current expansion. Placer prospecting in British Columbia has experienced a distinct revival since 1932, especially in the Stikine, Liard, Cariboo, and Atlin districts.

Yukon.—The discovery of gold in the Yukon River valley was reported in 1869, and bar-mining on the tributaries of the Yukon was conducted with increasing profit between 1881 and 1886. Ten years later, rich discoveries were made in creeks of the Klondike river, a right-bank tributary joining the Yukon at what is now Dawson city, and one of the greatest rushes in history was made to this locality. The richest streams in the district were Bonanza creek and its principal tributary, the Eldorado. There is still a considerable production of gold from alluvial operations, principally in the form of dredging, and, recently, interesting explorations have been made of auriferous quartz veins in the Carmacks district.

8.—Quantities of Gold Produced in Canada, by Provinces, calendar years 1911-37.

NOTE.—For the years 1862 to 1910, see Canada Year Book, 1916-17, pp. 268-269.

Year.	Nova Scotia.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.	Total.
	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.
1911....	7,781	613	2,062	—	—	10	238,496	224,197	473,159
1912....	4,385	642	86,523	—	—	73	251,815	268,447	611,885
1913....	2,174	701	219,801	—	—	Nil	297,459	282,838	802,973
1914....	2,904	1,292	268,264	—	—	48	252,730	247,940	773,178
1915....	6,636	1,099	406,577	—	—	195	273,376	230,173	918,056
1916....	4,562	1,034	492,481	—	—	82	219,633	212,700	930,492
1917....	2,210	1,511	423,261	440 ¹	—	Nil	133,742	177,667	738,831
1918....	1,176	1,939	411,976	1,926	—	27	180,163	102,474	699,681
1919....	850	1,470	505,739	724	—	24	167,252	90,705	766,764
1920....	690	955	564,995	781	—	Nil	124,808	72,778	765,007
1921....	439	635	708,213	207	—	49	150,792	65,994	926,329
1922....	1,042	Nil	1,000,340	156	—	Nil	207,370	54,456	1,263,364
1923....	655	667	971,704	31	—	Nil	200,140	60,144	1,233,341
1924....	1,047	833	1,241,728	1,180	—	Nil	245,719	34,825	1,525,785
1925....	1,626	1,602	1,461,039	4,424	—	Nil	219,227	47,817	1,735,735
1926....	1,678	3,680	1,497,215	188	—	Nil	225,866	25,601	1,754,228
1927....	3,151	8,331	1,627,050	182	—	42	183,094	30,935	1,852,785
1928....	1,290	60,006	1,578,434	19,813	—	68	196,617	34,364	1,890,592
1929....	2,687	90,798	1,622,267	22,455	—	5	154,204	35,892	1,928,308
1930....	1,272	141,747	1,736,012	23,189	—	Nil	164,331	35,517	2,102,068
1931....	460	300,075	2,085,814	102,969	—	195	160,069	44,310	2,693,892
1932....	964	401,105	2,280,105	122,507	11 ¹	83	199,004	40,608	3,044,387
1933....	1,382	382,886	2,155,519	125,310	5,400	324	238,995	39,493	2,949,309
1934....	3,525	390,097	2,105,339	132,321	5,405	393	296,196	38,798	2,972,074
1935....	9,376	470,552	2,220,336	142,613	14,323	150	391,633	35,707 ²	3,284,890 ²
1936....	11,960	666,905	2,378,503	139,273	48,981	109	451,938	50,359 ²	3,748,028 ²
1937 ³	19,639	712,004	2,587,385	160,395	65,018	46	503,403	47,982 ²	4,095,872 ²

¹ First reported production in this province.

² Includes production of the Northwest Territories.

³ Preliminary figures.

9.—Values of Gold Produced in Canada, by Provinces, calendar years 1911-37.

NOTE.—For the years 1862 to 1910, see Canada Year Book, 1916-17, p. 270.

Year. ¹	Nova Scotia.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.	Total.
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1911....	160,854	12,672	42,625	—	—	207	4,930,145	4,634,574	9,781,077
1912....	90,638	13,270	1,788,596	—	—	1,509	5,205,485	5,549,296	12,648,794
1913....	44,935	14,491	4,543,690	—	—	2	6,149,027	5,846,780	16,598,923
1914....	60,031	26,708	5,545,509	—	—	992	5,224,393	5,125,374	15,983,007
1915....	137,180	22,720	8,404,693	—	—	4,026	5,651,184	4,758,098	18,977,901
1916....	94,305	21,375	10,180,485	—	—	1,695	4,540,216	4,396,900	19,234,976
1917....	45,685	31,235	8,749,531	9,095 ²	—	2	2,764,693	3,672,703	15,272,992
1918....	24,310	40,083	8,516,299	39,814	—	558	3,724,300	2,118,325	14,463,689
1919....	17,571	30,388	10,454,553	14,966	—	500	3,457,406	1,875,039	15,850,423
1920....	14,263	19,742	11,679,483	16,145	—	2	2,580,010	1,504,455	15,814,098
1921....	9,075	13,127	14,640,062	4,279	—	1,013	3,117,147	1,364,217	19,148,920
1922....	21,540	2	20,678,862	3,225	—	2	4,286,718	1,125,705	26,116,050
1923....	13,540	13,788	20,086,904	641	—	2	4,137,261	1,243,287	25,495,421
1924....	21,643	18,253	25,668,795	24,393	—	2	5,079,462	719,897	31,532,443
1925....	33,612	33,116	30,202,357	91,452	—	2	4,531,824	988,465	35,880,826
1926....	34,687	76,072	30,950,180	3,886	—	2	4,669,065	529,220	36,263,110
1927....	65,137	172,217	33,634,108	3,762	—	868	3,784,889	639,483	38,300,464
1928....	26,667	1,240,434	32,629,126	409,571	—	1,406	4,064,434	710,367	39,082,005
1929....	55,545	1,876,961	33,535,234	464,186	—	103	3,187,680	741,954	39,861,663
1930....	26,295	2,930,170	35,886,552	479,359	—	2	3,397,023	734,202	43,453,601
1931....	9,920	6,471,075	44,980,280	2,220,512	—	4,205	3,451,865	955,539	58,093,396
1932 ¹	22,634	9,417,572	53,534,743	2,876,350	258 ³	1,949	4,672,429	953,438	71,479,373
1933....	39,525	10,950,539	61,647,843	3,583,866	154,440	9,267	6,835,257	1,129,500	84,350,237
1934....	121,613	13,458,347	72,634,195	4,565,075	186,472	13,558	10,218,762	1,338,531	102,536,553
1935....	329,942	16,558,725	78,133,624	5,018,551	504,026	5,279	13,781,565	1,256,529 ⁴	115,595,279 ⁴
1936....	418,959	23,361,683	83,318,960	4,878,733	1,715,804	3,818	15,831,188	1,764,076 ⁴	131,293,421 ⁴
1937 ⁴	687,169	24,913,020	90,532,601	5,612,221	2,274,980	1,609	17,614,071	1,678,890 ⁴	143,314,561 ⁴

¹ From 1911 to 1931, inclusive, values calculated on basis 1 fine oz.=20-671834; since then, at world prices in Canadian funds.² None reported.³ First reported production in this province.⁴ Includes value of production of the Northwest Territories.⁵ Preliminary figures.

World Production.—A sketch of the development of the gold-mining industry of the world since the discovery of America may refer to four successive periods. During the first period extending from 1493 to 1760, the annual production averaged nearly 337,000 fine oz. The placer mining of Brazil and Colombia swelled the average output of the last 60 years of the period to about 606,000 fine oz. per year.

The production of Russia from placer mining was a considerable factor in the next period, extending from 1761 to 1840, that country retaining first rank among the world's producers until 1837. The average annual production during the period was 565,500 fine oz.

The third period, extending from 1841 to 1890, was notable for the remarkable discoveries of gold in California and Australia in 1848 and 1851, respectively. The annual average during the 50 years was 4,937,000 fine oz. For the first decade the average was 1,761,000 fine oz. and for the second 6,448,000, while in the last decade it declined to 5,201,000. The production of the period was contributed chiefly by the United States, Australia, and Russia.

In the fourth period, extending from 1891 to the present time, covered by the figures of Table 10, the outstanding features were the entry of South Africa as an important and later as the leading producer, the increase in the output of most of the gold-producing countries through the introduction of the cyanide process and, more recently, the rapidly increasing world production as a result of the appreciation in the value of gold. The output was 6,320,000 fine oz. in 1891 and a steady increase was recorded until 1915, when 22,847,000 fine oz. were produced. Thereafter, the great increase in wages and in the other costs of production of an article of fixed value brought about a steady decline to a minimum production of 15,497,000 fine oz. in 1922. However, the notable decline in general commodity price levels which occurred in 1921 and 1922 again reduced the costs of gold production and the industry responded with a distinctly upward trend thereafter throughout the 1920's. The increased price of gold since 1930 has accelerated the expansion in world production during recent years with all previous records being exceeded.

10.—Quantities and Values of World Production of Gold, 1891-1936.

(From the Annual Report of the Director of the United States Mint.)

Year.	Quantity.	Value. ¹	Year.	Quantity.	Value. ¹	Year.	Quantity.	Value. ¹
	oz. fine.	\$		oz. fine.	\$		oz. fine.	\$
1891.....	6,320,194	130,650,000	1907.....	19,977,260	412,966,600	1923.....	17,845,349	368,896,948
1892.....	7,094,266	146,651,500	1908.....	21,422,244	422,837,000	1924.....	18,619,481	384,899,578
1893.....	7,618,811	157,494,800	1909.....	21,965,111	454,059,100	1925.....	18,673,178	384,009,921
1894.....	8,764,362	181,175,600	1910.....	22,022,180	455,239,100	1926.....	19,117,568	395,198,984
1895.....	9,615,190	198,763,600	1911.....	22,397,136	462,989,761	1927.....	19,058,736	393,979,954
1896.....	9,783,914	202,251,600	1912.....	22,605,068	467,288,203	1928.....	18,885,849	390,386,574
1897.....	11,420,068	236,073,700	1913.....	22,556,347	466,284,303	1929.....	19,207,452	397,153,303
1898.....	13,877,806	286,879,700	1914.....	21,652,883	447,608,337	1930.....	20,903,736	432,118,638
1899.....	14,837,775	306,724,100	1915.....	22,846,608	472,283,884	1931.....	22,284,290	460,650,527
1900.....	12,315,135	254,576,300	1916.....	22,032,542	455,455,670	1932.....	24,098,676	498,163,970
1901.....	12,625,527	260,992,900	1917.....	20,346,043	420,592,147	1933.....	25,400,295	525,070,547
1902.....	14,354,680	296,737,600	1918.....	18,588,127	384,251,378	1934.....	27,372,374	958,033,090 ¹
1903.....	15,852,620	327,702,700	1919.....	17,339,679	358,443,791	1935.....	29,999,245 ²	1,049,973,580 ²
1904.....	16,804,372	347,377,200	1920.....	16,146,830	333,784,924	1936 ³	32,960,158	1,153,605,530
1905.....	18,396,451	380,288,300	1921.....	15,997,692	330,702,190			
1906.....	19,471,080	402,503,000	1922.....	15,496,859	320,349,102			

¹ At \$20.67+ per oz. fine, prior to 1934; at \$35 per oz. fine in 1934 and later years.

² Revised

since publication of the 1937 Year Book.

³ Preliminary figures.

In 1936 the world's chief producers were the Union of South Africa, with a production of 11,336,214 fine oz. or 34.4 p.c., U.S.S.R. (Russia), including Siberia, with 5,240,000 fine oz. or 15.9 p.c., United States with 3,759,645 fine oz. or 11.4 p.c. and Canada with 3,735,675* fine oz. or 11.3† p.c. As Australia, Rhodesia, British West Africa, and British India were also important producers, about 55.6 p.c. of the world production of 1936 was produced in the British Empire.

Detailed statistics of world gold production for 1935 and 1936 appear in Table 11.

* The revised figure for Canadian gold production in 1936 is 3,748,028 fine oz.

† This percentage, derived from world production as reported by the Director of the United States Mint, is slightly less than that derived from estimates of the Imperial Institute, as given on p. 343.

11.—Quantities and Values of the World Production of Gold and Silver, by Countries, calendar years 1935 and 1936.

(Abridged from the Annual Report of the Director of the United States Mint.)

Country.	Calendar Year 1935.				Calendar Year 1936. ¹			
	Gold.		Silver.		Gold.		Silver.	
	Quantity.	Value (\$35-00 per oz.).	Quantity.	Value (\$0-64582 per oz.). ²	Quantity.	Value (\$35-00 per oz.).	Quantity.	Value (\$0-45399 per oz.). ³
NORTH AMERICA—	oz. fine.	\$	oz. fine.	\$	oz. fine.	\$	oz. fine.	\$
U.S.A.....	3,163,166	110,710,815	45,612,918	29,457,735	3,759,645	131,587,575	63,350,587	28,760,533
Canada.....	3,284,890	114,971,150	16,618,558	10,732,597	3,735,305	130,735,675	18,231,419	8,276,882
Mexico.....	682,338	23,881,830	75,589,199	48,817,016	753,967	26,388,845	77,463,901	35,167,836
Totals ⁴	7,143,350	250,017,255	138,945,055	89,733,495	8,263,987	289,239,545	160,270,907	72,761,389
CENTRAL AMERICA AND WEST INDIES	135,000	4,725,000	3,500,000	2,260,370	140,000	4,900,000	3,600,000	1,634,364
SOUTH AMERICA—								
Bolivia.....	64,301 ⁴	2,250,535	7,951,000	5,134,915	32,151 ⁵	1,125,285	10,723,333 ⁶	4,868,286
Brazil.....	120,597	4,220,895	10,000 ⁶	6,458	125,405	4,389,175	10,000 ⁶	4,540
Chile.....	268,308	9,390,780	1,050,043	678,139	258,458	9,046,030	1,431,383	649,834
Colombia.....	328,999	11,514,965	132,975	85,878	389,500	13,632,500	151,500	68,779
Peru.....	98,863	3,460,205	17,432,968	11,258,559	188,403	6,594,105	19,901,309	9,034,995
Venezuela....	112,390	3,933,650	7,000 ⁶	4,521	109,996	3,849,860	7,000 ⁶	3,178
Totals ⁴	1,163,643	40,727,505	26,720,638	17,256,723	1,285,366	44,987,810	32,839,151	14,908,646
EUROPE—								
Czecho-slovakia...	14,800	518,000	1,325,382	855,958	16,248	568,680	1,088,718	494,267
France.....	91,598	3,205,930	569,605	367,862	97,642	3,417,470	569,605 ⁴	258,595
Germany.....	5,948	208,180	6,257,788	4,041,405	7,584	265,440	6,541,551	2,969,799
Italy.....	3,215 ⁵	112,525	1,290,820 ⁴	833,637	3,697	129,395	1,366,407	620,335
Roumania....	143,424	5,019,840	484,319	312,783	150,746	5,276,110	485,373	220,355
Sweden.....	218,721	7,655,235	608,967	393,283	164,039	5,741,365	588,282	267,074
U.S.S.R.....	4,784,030	167,441,050	3,500,000 ⁷	2,260,370	5,240,000	183,400,000	4,000,000 ⁷	1,815,960
Yugoslavia....	74,172	2,595,020	1,753,534	1,132,467	84,106	2,943,710	1,785,620	810,654
Totals ⁴	5,343,014	187,005,490	17,199,118	11,107,534	5,769,562	201,934,670	18,001,202	8,172,366
ASIA—								
British India	327,652	11,467,820	5,850,406	3,778,309	333,239	11,663,365	5,977,345	2,713,655
China.....	154,966 ⁴	5,423,810	146,614 ⁴	94,686	154,966 ⁴	5,423,810	146,614 ⁴	66,561
Korea.....	523,948	18,338,180	1,464,986	946,117	520,842	18,229,470	1,500,000 ⁵	680,985
Japan.....	589,034	20,616,190	8,230,751	5,315,584	678,831	23,759,085	9,606,432	4,361,224
Philippine Is.	451,814	15,813,490	322,022	207,968	597,266	20,904,310	491,701	223,227
Totals ⁴	2,267,221	79,352,735	16,774,958	10,833,603	2,531,351	88,597,285	18,526,743	8,410,956
OCEANIA—								
Australia ⁸ ...	1,212,383	42,433,405	11,995,715	7,747,072	1,428,776	50,007,160	13,321,247	6,047,713
New Zealand	165,277	5,784,695	437,967	282,848	164,575	5,760,125	432,973	196,565
Totals ⁴	1,384,388	48,453,580	12,434,343	8,030,347	1,610,294	56,360,290	13,755,410	6,244,818
AFRICA—								
Belgian Congo.....	336,619	11,781,665	3,793,788	2,450,104	386,934	13,542,690	2,780,396	1,262,272
British W.A.	426,611	14,931,385	139,200	89,898	499,811	17,493,385	154,537	70,158
French W.A.	125,388	4,388,580	—	—	104,490	3,657,150	—	—
S. Rhodesia	726,281	25,419,835	132,087	85,305	797,061	27,897,135	145,072	65,861
Union S.A....	10,773,991	377,089,685	1,042,203	673,076	11,336,214	396,767,490	1,075,626	488,323
Totals ⁴	12,562,629	439,692,015	5,130,119	3,313,133	13,359,598	467,585,930	4,450,276	2,020,381
Totals for World⁹.....	29,999,245	1,049,973,580	220,704,231	1,42535,205	32,960,158	1,153,605,530	251,443,689	114,152,920

¹ Subject to revision.
countries not specified.² Average price per oz. fine in New York.³ Totals include other⁴ Previous year's figures.⁵ Estimate based on other years' production.⁶ Amount exported.⁷ Conjectural.⁸ Including New Guinea and Papua.⁹ None reported.

Subsection 2.—Silver.

Although no official statistics of the production of silver were published prior to 1887, the annual reports of the operating companies showed that from 1869 to 1885 about 4,000,000 oz. of silver, with a probable value of \$4,800,000, were produced in the Port Arthur district in Ontario. The development of the silver-lead deposits of British Columbia largely accounted for an increase to a production worth over \$2,000,000 in 1896. From 1896 to 1905 annual production varied in value between \$2,000,000 and \$3,500,000, rising rapidly during the next five years to 32,869,264 fine oz. valued at \$17,580,455 in 1910, as a result of the discovery of the rich ores of the Cobalt district.

The silver production of Canada is chiefly derived from the silver-lead-zinc ores of British Columbia, the silver-cobalt ores of northern Ontario and the silver-lead ores exported from Yukon. An appreciable amount of silver also occurs in the gold ores of northern Ontario, the nickel ores of the Sudbury district, the copper-gold ores of Quebec, Manitoba, and British Columbia and the pitchblende ores of the Northwest Territories. Thus in Canada silver is produced chiefly in combination with other metals.

Since 1926 British Columbia has been the chief silver-producing province. Small amounts are recovered from alluvial gold and crude gold bullion, but the Sullivan and Premier mines have been responsible for the greater part of the output from this province. The Sullivan, primarily noted for its lead and zinc production, is the largest producer of silver in Canada. Silver is also recovered from the copper ores produced in British Columbia.

During 1931 much interest was created by the discovery at Echo Bay, Great Bear lake, of mineral deposits in which high-grade native silver was associated with uranium- and radium-bearing ores. The first commercial production from this area occurred in 1932, when shipments were made to the Trail smelter in British Columbia. Production from this new camp has continued with shipments of silver-radium ores to the refinery at Port Hope, Ontario.

Statistics of the quantities and values of silver produced in Canada are given for the years since 1911 in Table 12, while statistics of the quantities and values produced in the chief silver-producing provinces are given in Table 13.

12.—Quantities and Values of Silver Produced in Canada, calendar years 1911-37.

NOTE.—For figures for the years 1887-1910, see p. 361 of the 1933 Year Book.

Year.	Quantity.	Value.	Year.	Quantity.	Value.	Year.	Quantity.	Value.
	oz. fine	\$		oz. fine.	\$		oz. fine.	\$
1911.....	32,559,044	17,355,272	1920.....	13,330,357	13,450,330	1929.....	23,143,261	12,264,308
1912.....	31,955,560	19,440,165	1921.....	13,543,198	8,485,355	1930.....	26,443,823	10,089,376
1913.....	31,845,803	19,040,924	1922.....	18,626,439	12,576,758	1931.....	20,562,247	6,141,943
1914.....	28,449,821	15,593,631	1923.....	18,601,744	12,067,509	1932.....	18,347,907	5,811,081
1915.....	26,625,960	13,228,842	1924.....	19,736,323	13,180,113	1933.....	15,187,950	5,746,027
1916.....	25,459,741	16,717,121	1925.....	20,228,988	13,971,150	1934.....	16,415,282	7,790,840
1917.....	22,221,274	18,091,895	1926.....	22,371,924	13,894,531	1935.....	16,618,558	10,767,148
1918.....	21,383,979	20,693,704	1927.....	22,736,698	12,816,677	1936.....	18,334,487	8,273,804
1919.....	16,020,657	17,802,474	1928.....	21,936,407	12,761,725	1937 ¹	22,683,032	10,180,371

¹ Preliminary figures.

13.—Quantities and Values of Silver Produced in Canada, by Provinces, calendar years 1911-37.

NOTE.—For the years 1887 to 1910, see Canada Year Book, 1916-17, p. 271. Nova Scotia, Saskatchewan, and Alberta have also shown a small production in recent years, production during 1936 being shown in Table 5 of this chapter, pp. 349-351.

Year.	Quebec.		Ontario.		Manitoba.		British Columbia.		Yukon and Northwest Territories.	
	oz. fine	\$	oz. fine.	\$	oz. fine.	\$	oz. fine.	\$	oz. fine.	\$
1911..	18,435	9,827	30,540,754	16,279,443	Nil	—	1,887,147	1,005,924	112,708	60,078
1912..	9,465	5,758	29,214,025	17,772,352	Nil	—	2,651,002	1,612,737	81,068	49,318
1913..	34,573	20,672	28,411,261	16,987,377	Nil	—	3,312,343	1,980,483	87,626	52,393
1914..	57,737	31,646	25,139,214	13,779,055	Nil	—	3,159,897	1,731,971	92,973	50,595
1915..	63,450	31,524	22,748,609	11,302,419	Nil	—	3,565,852	1,771,658	248,049	123,241
1916..	98,610	64,748	21,608,158	14,188,133	Nil	—	3,392,872	2,227,794	360,101	236,446
1917..	136,194	110,885	19,301,835	15,714,975	7,201	5,863	2,655,994	2,162,430	119,605	97,379
1918..	178,675	172,907	17,198,737	16,643,552	13,316	12,886	3,921,336	3,794,755	71,915	69,594
1919..	140,926	156,600	12,117,878	13,465,628	20,700	23,069	3,713,537	4,126,556	27,556	30,621
1920..	61,003	61,552	9,907,626	9,996,795	15,510	15,649	3,327,028	3,356,971	19,190	19,363
1921..	38,084	23,861	9,761,607	6,116,037	33	20	3,350,357	2,099,133	393,092	246,288
1922..	Nil	—	10,811,903	7,300,305	20	14	7,150,937	4,823,384	663,493	447,997
1923..	33,006	21,412	10,540,943	6,838,226	5	3	6,113,327	3,965,899	1,914,438	1,241,953
1924..	83,814	55,972	11,272,567	7,527,933	140	93	8,153,003	5,444,657	226,755	151,429
1925..	214,943	148,451	10,529,131	7,271,944	477	329	8,579,458	5,925,403	304,893	624,946
1926..	375,986	233,513	9,274,965	5,760,402	18	11	10,625,816	6,599,376	2,095,027	1,301,159
1927..	740,864	417,625	9,307,953	5,246,893	12	7	11,040,445	6,223,499	1,647,295	928,580
1928..	908,959	528,796	7,242,601	4,213,456	1,763	1,026	10,943,367	6,366,413	2,839,633	1,651,985
1929..	813,821	431,268	8,890,726	4,711,462	2,644	1,401	10,156,408	5,382,185	3,279,530	1,737,922
1930..	571,164	217,922	10,205,683	3,893,876	94,653	36,114	11,825,930	4,512,065	3,746,326	1,429,373
1931..	530,345	158,414	7,438,951	2,222,014	836,547	249,877	8,061,599	2,408,000	3,694,728	1,103,615
1932..	628,902	199,184	6,335,788	2,006,648	1,036,497	328,275	7,293,462	2,309,958	3,053,188	966,994
1933..	471,419	178,351	4,535,680	1,715,975	1,101,578	416,758	6,737,057	2,548,817	2,227,476	842,717
1934..	470,254	223,187	5,321,160	2,525,470	1,252,920	594,647	8,729,721	4,143,204	553,320	262,611
1935..	668,836	433,338	5,161,651	3,344,229	1,256,454	781,660	9,178,400	5,946,677	201,221	130,371
1936..	724,339	326,872	5,219,366	2,355,343	791,489	357,175	9,748,715	4,399,303	1,100,430	496,591
1937..	908,432	407,713	4,695,220	2,107,262	985,101	442,123	11,162,689	5,009,926	4,082,490	1,832,262

¹ Preliminary figures.

World Production of Silver.—The world production of silver was estimated by the Director of the United States Mint, as shown in Table 11 of this chapter, at 251,443,689 fine oz. for 1936, an increase of 14 p.c. from 1935 and only 3.7 p.c. less than 1929, when world production reached a record maximum of 260,970,029 fine oz. The silver production of Canada in 1936 was 18,231,419 fine oz., or about 7.2* p.c. of the estimated world total for that year. This placed Canada fourth, next to Mexico, the United States, and Peru.

In Table 14 the world production, value and average price of silver are given for each year from 1860 up to the present. During the period from 1860 to 1872, silver was still a monetary base in parts of the western world and the price remained fairly stable at about \$1.32 to \$1.35 per fine oz. (about 15½ oz. silver = 1 oz. gold), although production is estimated to have more than doubled during these 12 years. After the demonetization of silver in Germany and the United States, production continued to increase rapidly while the price declined to a generally lower level. During the disturbed conditions of the war period production was curtailed and the price rose to \$1.12 per fine oz. in 1919. However, in the period 1922-29 production increased to new records although the price declined to about half that of 1919. In the course of the depression the price declined further by nearly 50 p.c. and production contracted also, but both have tended to recover since 1932. The fact that silver is to a great extent a by-product in the mining of other metals, helps to explain its increasing production, in spite of lower prices, since 1872.

* This percentage, based on the world estimate of the Director of the United States Mint, differs slightly from that on p. 343, based on the world estimate of the Imperial Institute.

14.—Quantities and Values of World Production of Silver, with Annual Average Prices, 1860-1936.

(From the Annual Report of the Director of the United States Mint.)

Year.	Quantity.	Value.	Average Price per Fine Oz. ¹	Year.	Quantity.	Value.	Average Price per Fine Oz. ¹	Year.	Quantity.	Value.	Average Price per Fine Oz. ¹
	'000 oz. fine.	\$ '000.	\$		'000 oz. fine.	\$ '000.	\$		'000 oz. fine.	\$ '000.	\$
1860....	29,095	39,337	1-352	1886...	93,297	92,794	0-995	1912...	230,904	141,972	0-615
1861....	35,402	46,191	1-305	1887...	96,124	94,031	0-979	1913...	210,013	126,848	0-604
1862....	35,402	47,651	1-346	1888...	108,823	102,186	0-939	1914...	172,264	95,262	0-553
1863....	35,402	47,616	1-345	1889...	120,214	112,414	0-935	1915...	173,001	89,912	0-519
1864....	35,402	47,616	1-345	1890...	126,095	131,937	1-046	1916...	180,802	124,011	0-686
1865....	35,402	47,368	1-338	1891...	137,170	135,500	0-988	1917...	186,125	166,241	0-893
1866....	43,052	57,646	1-339	1892...	153,152	133,404	0-871	1918...	203,159	200,002	0-985
1867....	43,052	57,173	1-328	1893...	165,473	129,120	0-780	1919...	179,850	201,588	1-121
1868....	43,052	57,086	1-326	1894...	164,610	104,493	0-635	1920...	173,296	176,655	1-019
1869....	43,052	57,043	1-325	1895...	167,501	109,546	0-654	1921...	171,286	108,110	0-631
1870....	43,052	57,173	1-328	1896...	157,061	105,859	0-673	1922...	209,815	142,536	0-679
1871....	63,317	83,958	1-326	1897...	160,421	96,253	0-600	1923...	246,010	172,276	0-700
1872....	63,317	83,705	1-323	1898...	169,055	99,743	0-590	1924...	239,485	178,311	0-744
1873....	63,267	82,121	1-298	1899...	168,337	101,003	0-600	1925...	245,214	172,498	0-703
1874....	55,301	70,674	1-279	1900...	173,591	107,626	0-620	1926...	253,795	159,569	0-629
1875....	62,262	77,578	1-246	1901...	173,011	103,807	0-600	1927...	253,981	144,047	0-570
1876....	67,753	78,323	1-156	1902...	162,763	86,265	0-530	1928...	257,925	151,214	0-586
1877....	62,680	75,279	1-201	1903...	167,689	90,552	0-540	1929...	260,970	139,961	0-536
1878....	73,385	84,540	1-153	1904...	164,195	95,233	0-580	1930...	248,708	96,310	0-387
1879....	74,383	83,533	1-124	1905...	172,318	105,114	0-610	1931...	195,920	56,842	0-290
1880....	74,795	85,641	1-145	1906...	165,054	111,721	0-677	1932...	164,893	46,506	0-282
1881....	79,021	89,926	1-138	1907...	184,207	121,577	0-660	1933...	169,159	59,201	0-350
1882....	86,472	98,232	1-136	1908...	203,131	108,655	0-535	1934...	190,398	91,930	0-483
1883....	89,175	98,984	1-111	1909...	212,149	110,364	0-520	1935...	220,704 ²	142,535 ²	0-646
1884....	81,568	90,785	1-113	1910...	221,716	119,727	0-540	1936...	251,444	114,153	0-454
1885....	91,610	97,519	1-065	1911...	226,193	122,144	0-540				

¹ At the average par price of a fine ounce of silver in London, excepting the years 1918-22, inclusive, and 1931-36, for which the means of the New York bid and asked prices were used. ² Revised since the publication of the 1937 Year Book.

³ Preliminary figures.

Subsection 3.—Copper.

The copper-mining industry has developed at a very rapid rate. A production of 3,505,000 lb. in 1886 had doubled 6 years later. By 1913, the output had increased over twenty-one fold, amounting to 76,976,925 lb. The extraordinary demand for war requirements resulted in an average production from 1916 to 1918 of 115,048,931 lb. In the post-war depression production dropped to less than 43,000,000 lb. in 1922, but recovered rapidly and by 1930 had risen to a new peak of 303,478,356 lb. In the two following years, as a result of the world-wide depression with very low prices prevailing for copper, production declined to 247,679,070 lb. in 1932. Since then output has grown to 421,027,732 lb. in 1936. Some Canadian copper producers, located principally in Manitoba, Ontario, and Quebec, were fortunate in possessing ores containing sufficiently high values in precious metals to permit of operation during the years of abnormally low copper prices prevailing from 1930 to 1935. However, the unfavourable copper market which existed during the depression did not encourage production and the search for and development of new copper properties was curtailed. In June of 1932 the United States instituted a duty of 4 cents per pound on foreign copper, which adversely affected copper production in British Columbia. On the other hand, Canadian copper enjoys a preference in the United Kingdom and a large part of Canadian production now goes there. The improvement in copper prices accompanying general industrial

recovery and rearmament requirements stimulated the production of the metal in 1936 and 1937.

Quebec.—Until 1894, when Ontario took the lead, Quebec was the chief copper-producing province of Canada, the principal mines being the Eustis and Huntingdon properties in the Eastern Townships. There is still an annual production from this field. Developments in the Rouyn Camp of northwestern Quebec have resulted in a greatly increased production of copper since 1927. Since 1931 the Canadian Copper Refiners Ltd., have treated blister copper in their electrolytic refinery located at Montreal East. This material comes from the Noranda smelter in Quebec and the Flin Flon smelter in Manitoba. Gold, silver, selenium, and tellurium are also products of the Montreal refinery.

Ontario.—The Sudbury deposits were first noted in 1856, but did not attract attention until 1883-84, when, during the construction of the C.P.R., a railway cutting was made through the small hill on which the Murray mine was afterwards located. During the first years the deposits were developed for their copper content alone; not until 1887 was the presence of nickel determined and the true value of the ores known. These nickel-copper ores of the Sudbury area are now the source of nearly all the copper produced in Ontario. Under the International Nickel Co. of Canada, an amalgamation of the former International Nickel Co. and the Mond Nickel Co., an extensive program of expansion in the mining and metallurgical facilities of the district has been carried out. A subsidiary company, the Ontario Refining Co., Ltd., operates a copper refinery at Copper Cliff where electrolytically refined copper, precious metals, selenium, and tellurium are produced from the blister copper smelted by the International Nickel Co., chiefly from ores from their own mines in the district. The Company also operates the Acton precious metals refinery situated near London, England, where it recovers, in a refined state, the gold, silver, and platinum metals contained in the concentrates produced at both the Swansea and Port Colborne nickel refineries. The Falconbridge Nickel Mines, operating a mine in Falconbridge township, make a copper-nickel matte which is shipped to Norway for refining. Adverse industrial conditions led to reductions in the copper production of Ontario in 1931 and 1932. There has been, however, a remarkable recovery in production since then.

Manitoba and Saskatchewan.—During the four years 1917-20, when high prices prevailed for copper, ores containing 9,866,328 lb. of copper were shipped by the Mandy mine. Much development has been carried on in the Flinflon district on the Manitoba-Saskatchewan boundary since the War, and large bodies of ore have been proven on the Flinflon property of the Hudson Bay Mining and Smelting Co. and the Sherritt-Gordon property. About 135 miles of branch line from the Hudson Bay railway provide these properties with transportation facilities. A copper smelter and electrolytic zinc plant are operated by the Hudson Bay Mining and Smelting Co. at Flinflon, while a large hydraulic development on the Churchill river provides the necessary power. Production from the plants of this Company has been continuous since 1930.

British Columbia.—Until 1930, British Columbia had been the leading copper producer among the provinces for many years, but it then gave first place to Ontario and since 1930 production has greatly declined, owing principally to the cessation in August, 1935, of mining and smelting operations at Anyox, as a result of the low price of copper and exhaustion of ore reserves. In 1937, the Granby Company resumed operations at its Copper Mountain mine, and an increase in British Columbia copper output resulted.

15.—Quantities of Copper Produced in Canada, by Provinces, with Total Values, calendar years 1911-37.

NOTE.—For the years 1886 to 1910, see Canada Year Book, 1916-17, p. 272.

Year.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	British Columbia.	Yukon.	Totals.	
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	\$
1911.....	2,436,190	17,932,263	-	-	35,279,558	-	55,648,011	6,886,998
1912.....	3,282,210	22,250,601	-	-	50,526,656	1,772,660 ¹	77,832,127	12,718,548
1913.....	3,455,887	25,885,929	-	-	45,791,579	1,843,530	76,976,925	11,753,606
1914.....	4,201,497	28,948,211	-	-	41,219,202	1,367,050	75,735,960	10,301,606
1915.....	4,197,482	39,361,464	-	-	56,692,988	533,216	100,785,150	17,410,635
1916.....	5,703,347	44,997,035	-	-	63,642,550	2,807,096	117,150,028	31,867,150
1917.....	5,015,560	42,867,774	1,116,000 ¹	-	57,730,959	2,460,097	109,227,332 ²	29,687,989 ²
1918.....	5,869,649	47,074,475	2,339,751	-	62,865,681	619,878	118,769,434	29,250,536
1919.....	2,691,695	24,346,623	3,348,000	-	44,502,079	165,184	75,053,581	14,028,265
1920.....	880,638	32,059,993	3,062,577	-	45,319,771	277,712	81,600,691	14,244,217
1921.....	352,308	12,821,385	Nil	-	34,447,127	Nil	47,620,820	5,953,555
1922.....	Nil	10,943,636	Nil	-	31,936,182	Nil	42,879,818	5,738,177
1923.....	Nil	31,656,800	Nil	-	55,224,737	Nil	86,881,537	12,529,186
1924.....	1,893,008	37,113,193	Nil	-	65,451,246	Nil	104,457,447	13,604,638
1925.....	2,510,141	39,718,777	Nil	-	69,221,600	Nil	111,450,518	15,649,882
1926.....	2,674,058	41,312,867	Nil	-	89,108,017	Nil	133,094,942	17,490,300
1927.....	3,119,848	45,341,295	Nil	-	91,686,297	Nil	140,147,440	17,195,487
1928.....	33,697,949	66,607,510	Nil	-	102,283,210	107,377	202,696,046	28,598,249
1929.....	55,337,169	88,879,853	Nil	-	103,903,738	Nil	248,120,760	43,415,251
1930.....	80,310,363	127,718,871	2,087,609	-	93,318,885	42,628	303,478,356	37,948,359
1931.....	68,376,985	112,882,625	45,821,432	-	65,223,348	Nil	292,304,390	24,114,065
1932.....	67,336,692	77,055,413	52,706,861	-	50,580,104	Nil	247,679,070	15,294,058
1933.....	69,943,882	145,504,720	38,163,181	3,223,941 ¹	43,146,724	Nil	299,982,448	21,634,853
1934.....	73,968,545	205,059,539	30,867,141	6,618,913	48,246,924	Nil	364,761,062	26,671,438
1935.....	79,050,906	252,027,928	38,011,371	11,429,452	38,478,043	Nil	418,997,700	32,311,960
1936.....	66,340,175	287,914,078	29,853,220	14,971,609	21,169,343	Nil	421,027,732 ³	35,514,101 ³
1937.....	94,653,135	322,039,208	45,952,000	22,400,000	45,809,004	Nil	531,041,878 ³	69,049,734 ³

¹ First reported production in this province or territory. ² Includes a small production from New Brunswick and Alberta. ³ Includes 779,307 lb. valued at \$73,855 produced in Nova Scotia in 1936, and 188,531 lb. at \$24,656 in 1937. ⁴ Preliminary figures.

World Production of Copper.—World production of copper was estimated at 1,881,600 short tons in 1936, as compared with 2,150,400 tons in 1929, the record year. Canada had an output of 210,514 tons in 1936, producing about 11.2 p.c. of the estimated world total and standing third among the nations.

16.—Copper Production of the Leading Countries and of the World, 1913-36.

(In short tons of 2,000 pounds.)

NOTE.—Figures in this table, except as indicated, are from the Imperial Institute's Statistical Summary.

Year.	Canada. ¹	North- ern Rho- desia.	Belgian Congo.	Chile.	Japan.	Mexico.	Peru.	Spain and Portugal	United States.	World Produc- tion. ²
1913...	38,488	-	-	46,574	73,283	58,185	30,600	39,683	614,255	1,072,674
1914...	37,868	-	-	49,221	77,650	40,043	29,853	29,652	579,133	1,021,233
1915...	50,393	-	-	57,680	83,108	34,128	38,269	40,895	712,126	1,188,172
1916...	58,575	-	-	78,559	110,900	60,751	47,472	39,021	971,123	1,533,294
1917...	54,614	-	-	112,985	119,058	52,348	49,784	45,084	961,016	1,579,675
1918...	59,385	-	-	117,851	99,583	83,233	48,944	50,596	968,687	1,569,523
1919...	37,527	-	-	87,721	86,468	66,661	43,243	38,581	604,642	1,069,437
1920...	40,800	-	-	109,075	74,727	49,866	36,356	25,353	635,248	1,082,652
1921...	23,810	-	-	65,299	59,626	13,576	36,689	36,596	238,420	600,960
1922...	21,440	-	-	142,830	59,663	29,842	40,133	40,234	511,970	995,045
1923...	43,441	-	-	201,042	70,315	60,538	48,684	57,115	754,000	1,411,980
1924...	52,229	-	-	209,855	69,378	49,150	38,495	60,713	819,000	1,522,394
1925...	55,725	83 ³	99,323 ³	209,654	72,413	59,123	41,190	63,993	854,000	1,589,717
1926...	66,547	793	88,889	223,015	72,277	62,303	46,703	63,933	878,000	1,637,489
1927...	70,074	3,685	98,278	264,242	73,381	63,760	52,438	60,351	847,419	1,682,361
1928...	101,348	6,642	123,962	316,141	75,214	72,280	62,233	61,600	904,898	1,892,800
1929...	124,060	6,122	151,007	353,434	83,190	95,409	61,855	75,040	997,555	2,150,400
1930...	151,739	7,021	153,164	242,865	87,119	80,922	52,416	73,920	705,073	1,789,600
1931...	146,152	25,536	132,160	247,520	83,608	59,757	48,832	62,720	528,875	1,523,200
1932...	123,840	97,708	59,360	113,792	79,230	38,862	27,654	38,080	238,111	996,800
1933...	149,992	144,954	73,409	180,112	76,095	43,900	34,466	34,720	190,643	1,142,400
1934...	182,381	176,511	121,348	282,964	73,857	48,797	30,557	35,840	237,405	1,411,200
1935...	209,499	188,898	118,699	294,408	76,401	43,401	33,865	35,840	380,491	1,646,400
1936...	210,514	191,215	105,455	282,240	85,686	32,753	36,960	30,240	600,711	1,881,600

¹ Dominion Bureau of Statistics figures. ² Totals include productions of other countries not specified. ³ First reported production for this country. ⁴ Preliminary figures.

Subsection 4.—Lead.

Lead is obtained in Canada largely from the ores of British Columbia, where production began with 88,665 lb. in 1891. Bounties were paid on lead produced in Canada from 1899 to 1918 (see the 1920 Year Book, p. 454) but the highest production of this period was 56,900,000 lb. in 1905. However, as a result of developments in British Columbia mentioned below, production has increased greatly since the War, as shown in Table 17.

British Columbia.—In the East and West Kootenay districts there are many important mines, the principal of which is the Sullivan lead-zinc mine near Kimberley. The ore averages about 11 p.c. lead, 7 p.c. zinc, and 5 ounces of silver to the ton. The successful solving by the Consolidated Mining and Smelting Co. of the metallurgical problems connected with the separation and reduction of these lead-zinc ores accounts to a considerable extent for the rapid growth in lead production during recent years. As a result of the low prices prevailing from 1930 to 1935 for lead, zinc, and silver, many of the small silver-lead mines of the Slocan have remained idle.

Other Provinces.—Occurrences of lead have been found in Gaspé peninsula and in the Rouyn district of Quebec, but the only production of importance has come from the Notre-Dame-des-Anges district, Portneuf County, where the Tetreault mine produces lead and zinc concentrates. Lead production in Ontario has come chiefly from the Galetta mine and smelter, which closed down in the summer of 1931. An important production of lead came in recent years from the silver-lead ores of the Mayo district of Yukon, and in 1935 production of silver-lead-zinc concentrates was resumed at the Sterling mine, Richmond County, Nova Scotia.

17.—Quantities and Values of Lead Produced from Canadian Ores, calendar years 1911-37.

NOTE.—For figures for the years 1887-1910, see 1929 Year Book, p. 367.

Year.	Quantity.	Value.	Price per Pound.	Year.	Quantity.	Value.	Price per Pound.
	lb.	\$	cts.		lb.	\$	cts.
1911.....	23,784,969	827,717	3.480	1924.....	175,485,499	14,221,345	8.104
1912.....	35,763,476	1,597,554	4.467	1925.....	253,590,578	23,127,460	9.120
1913.....	37,662,703 ¹	1,754,705	4.659	1926.....	283,801,265	19,240,661	6.751 ²
1914.....	36,337,765	1,627,568	4.479	1927.....	311,423,161	16,477,139	5.256
1915.....	46,316,450	2,593,721	5.600	1928.....	337,946,688	15,553,231	4.576
1916.....	41,497,615	3,532,692	8.513	1929.....	326,522,566	16,544,248	5.063
1917.....	32,576,281	3,628,020	11.137	1930.....	332,894,163	13,102,635	3.933
1918.....	51,398,002	4,754,315	9.250	1931.....	267,342,482	7,260,183	2.710
1919.....	43,827,669	3,053,037	6.966	1932.....	255,947,378	5,409,704	2.114
1920.....	35,953,717	3,214,262	8.940	1933.....	266,475,191	6,372,998	2.392
1921.....	66,679,592	3,828,742	5.742	1934.....	346,275,576	8,436,658	2.436
1922.....	93,307,171	5,817,702	6.219	1935.....	339,105,079	10,624,772	3.133
1923.....	111,234,466	7,985,522	7.179	1936.....	353,180,909	14,993,869	3.913
				1937 ³	411,221,232	21,013,404	5.110

¹ Previous to 1913 the figures reported show the metal content of the shipments and are somewhat in excess of the actual amounts recovered. Since 1912 the data given represent the quantities of lead produced in Canada from domestic ores, together with the estimated lead recovery from lead ores and concentrates exported.

² From 1911 to 1925, average prices at Montreal; from 1926 to 1936, average yearly prices at London, England.

³ Preliminary figures.

World Production.*—The world production of lead in 1936 was about 1,490,000 long tons. The principal producers were the United States with 22·3 p.c., Australia 15·0 p.c., Mexico 14·2 p.c., Canada 11·5 p.c., India 6·0 p.c., Yugoslavia 4·9 p.c., Germany 4·1 p.c., and Spain 2·7 p.c.

Subsection 5.—Nickel.

With the exception of the small amounts of nickel recovered from the ores of the Cobalt district and relatively small shipments in recent years of nickel-copper ore from the B.C. Nickel Mines, Ltd., the Canadian production of nickel has been derived entirely from the well-known nickel-copper deposits of the Sudbury district, Ontario. A brief description of the history and development of the nickel-copper mining industry will be found under "Copper" in Subsection 3 of this section. From 830,477 lb. in 1889, the production of nickel increased continually to a war-time peak of 92,507,293 lb. in 1918. After a slump to 17,597,123 lb. in 1922, production expanded rapidly again and in 1928 exceeded that of the war year 1918, while 1929 established a still higher record. The depression brought another decline to 30,327,968 lb. in 1932, but a remarkable recovery has again been made and new records established each year since 1933, as shown in Table 18.

18.—Quantities and Values of Nickel Produced in Canada, calendar years 1911-37.

NOTE.—For figures for the years 1889-1910, see 1929 Year Book, p. 368.

Year.	Quantity.	Value.	Year.	Quantity.	Value.	Year.	Quantity.	Value.
	lb.	\$		lb.	\$		lb.	\$
1911.....	34,098,744	10,229,623	1920....	61,335,706	24,534,282	1929....	110,275,912	27,115,461
1912.....	44,841,542	13,452,463	1921....	19,293,060	6,752,571	1930....	103,768,857	24,455,133
1913.....	49,676,772	14,903,032	1922....	17,597,123	6,158,993	1931....	65,666,320	15,267,453
1914.....	45,517,937	13,655,381	1923....	62,453,843	18,332,077	1932....	30,327,968	7,179,862
1915.....	68,308,657	20,492,597	1924....	69,536,350	12,126,739 ¹	1933....	83,264,658	20,130,480
1916.....	82,958,564	29,035,498	1925....	73,857,114	15,946,672	1934....	128,687,340	32,139,425
1917.....	82,330,280	33,732,112	1926....	65,714,294	14,374,163	1935....	138,516,240	35,345,103
1918.....	92,507,293	37,002,917	1927....	66,798,717	15,262,171	1936....	169,739,393	43,876,525
1919.....	44,544,883	17,817,953	1928....	96,755,578	22,318,907	1937 ² ...	224,790,974 ³	59,507,176

¹ A change in the method of computing the value of nickel production accounts for the drop in value after 1923.

² Preliminary figures.

³ Not including experimental shipments from British Columbia.

The nickel-bearing rocks of the Sudbury district, with a width of about two and one-half miles, form a wide ellipse 36 miles long and 13 miles broad. The ore of the district is mined principally for its nickel and copper content but gold, silver, selenium, tellurium, and metals of the platinum group, though present in relatively small quantities, are profitably recovered in the metallurgical processes. The proved deposits of nickel ore in Canada are estimated to be sufficient to provide for the world's requirements for many years, while there are still large reserves undeveloped.

In recent years the producing companies have instituted extensive researches to discover and encourage new peace-time uses for the metal. The success attending

* From the Imperial Institute's Statistical Summary.

their efforts in that direction accounted very largely for the marked increase in production during the nineteen-twenties. The automobile industry, electrical machinery, cooking utensils, new submarine cables, and various nickel alloys all helped to absorb this increased production.

World Production.*—The world production of nickel was about 87,200 long tons in 1936, of which output about 87 p.c. was Canadian in origin, while the remainder was derived chiefly from New Caledonia.

Subsection 6.—Cobalt.

The major portion of the world supply of cobalt was for almost two decades prior to 1925 derived from the silver-cobalt-nickel arsenides of the Cobalt district, when the cobalt produced by refineries in southern Ontario practically controlled world production. Large deposits of cobalt-bearing ores occur in Africa in the Belgian Congo, Northern Rhodesia, and French Morocco, and the introduction into world markets of cobalt from this source has increased world production while Canadian production has declined since 1925.

The ore bodies at Cobalt, discovered in 1903, carry silver, cobalt, nickel, bismuth, and arsenic. The Deloro smelter treats ores and residues and disposes of cobalt oxide, metallic cobalt and unseparated oxides of nickel and cobalt. Production of cobalt, computed as the metallic cobalt and cobalt in oxides from Canadian smelters, together with the cobalt recovered in ores exported from the mines and including cobalt in any residues exported, amounted in 1936 to 887,591 lb. valued at \$804,676, as against 1,116,492 lb. valued at \$2,328,517 in 1925. Production in 1937 is estimated at 507,064 lb. valued at \$848,247.

Subsection 7.—Zinc.

The zinc-mining industry of Canada has recently made rapid strides, largely on account of the application of improved metallurgical methods in the treatment of the lead-zinc ores of British Columbia and the production of electrolytic zinc from the Flinflon copper-zinc ores of Manitoba. The growth of production since 1911 is shown in Table 19.

The principal zinc-mining regions of British Columbia are situated in the Kootenay district, where there are large deposits of silver-lead-zinc ore. The chief producing mine is the Sullivan near Kimberley, where the ore worked is a replacement deposit of considerable size. Other mines are located in the Ainsworth and Slocan divisions of the West Kootenay district. The Britannia mine on Howe sound, while primarily a copper-gold property, also produces zinc concentrates.

In northwestern Manitoba, the Flin Flon and Sherritt-Gordon mines have ores in which zinc is closely associated with copper and gold, and refined zinc has been made at the Flin Flon smelter since the autumn of 1930. In Quebec, zinc and lead concentrates are produced at the Tetreault mine, Notre-Dame-des-Anges, and zinc concentrates were shipped also during 1937 from the Waite-Amulet mine in the Rouyn district. At the Sterling mine, Richmond County, Nova Scotia, the production of lead and zinc concentrates was resumed in 1936.

* From the Imperial Institute's Statistical Summary.

19.—Quantities¹ and Values of Zinc Produced in Canada, calendar years 1911-37.

Year.	Quantity. ¹	Value.	Average Price per lb.	Year.	Quantity. ¹	Value.	Average Price per lb.
	lb.	\$	cts.		lb.	\$	cts.
1911.....	1,877,479	108,105	5-758	1925.....	109,268,511	8,328,446	7-622
1912.....	4,283,760	297,421	6-943	1926.....	149,938,105	11,110,413	7-410
1913.....	5,640,195	318,558	5-648	1927.....	165,495,525	10,250,793	6-194
1914.....	7,246,063	377,737	5-213	1928.....	184,647,374	10,143,050	5-493
1915.....	9,771,651	1,292,789	13-230	1929.....	197,267,087	10,626,778	5-387
1916.....	23,364,760	2,991,623	12-804	1930.....	267,643,505	9,635,166	3-600
1917.....	29,668,764	2,640,817	8-901	1931.....	237,245,451	6,059,249	2-554
1918.....	35,083,175	2,862,436	8-159	1932.....	172,283,558	4,144,454	2-406
1919.....	32,194,707	2,362,448	7-338	1933.....	199,131,984	6,393,132	3-211
1920.....	39,863,912	3,057,961	7-671	1934.....	298,579,683	9,087,571	3-044
1921.....	53,089,356	2,471,310	4-655	1935.....	320,649,859	9,936,908	3-099
1922.....	56,290,000	3,217,536	5-716	1936.....	333,182,736	11,045,007	3-315
1923.....	60,416,240	3,991,701	6-607	1937 ²	370,418,073	18,157,894	4-902
1924.....	98,909,077	6,274,791	6-344				

¹ Estimated foreign smelter recoveries and refined zinc made in Canada.² Preliminary figures.

Subsection 8.—Iron.*

Iron ore is widely distributed in Canada and extensive deposits have been discovered from time to time, but none at present available can compete in low cost with high-grade external sources of supply.

Iron ore was first mined and smelted in the province of Quebec early in the eighteenth century, and from that time until 1883 the industry was carried on almost continuously at Three Rivers. Other furnaces using local ore were operated at Radnor Forges and Drummondville, the last to shut down being the Drummondville furnace in 1911. At the present time only titaniferous iron ore is mined in Quebec; this ore is produced near Baie St. Paul and is shipped for its titanium content.

More iron ore has been produced in Ontario than in any other province. Large quantities of red hæmatite were taken from the Helen mine in the Michipicoten district, while the Magpie mine in the same district produced siderite which was roasted before being shipped to the blast furnaces at Sault Ste. Marie.

No ores for the production of iron have been mined in Canada since 1923. The large iron and steel industry of Nova Scotia draws its requirements from the easily accessible and abundant supplies of the high-grade Wabana deposit in Newfoundland. In Ontario, also, there has been a broad development of the primary iron and steel industry largely because cheap and high-grade supplies of iron ore are readily available from the Mesabi range of Minnesota, while coal supplies are drawn from the nearby coal-fields of Pennsylvania.

A revival in iron-ore mining in Ontario is indicated by the fact that, during the summer of 1937, the Algoma Properties Ltd. commenced rebuilding the surface equipment at the new Helen mine in the Michipicoten district, where reserves are estimated at 60,000,000 tons of iron carbonate rather high in sulphur and therefore requiring roasting to fit it for use in the blast furnace. An Act passed by the Ontario Legislature has provided for a bounty of two cents per unit of iron content for a period of 10 years commencing Jan. 1, 1939.

* The known resources of iron ore were briefly described at p. 411 of the 1934-35 Year Book, and a sketch of the iron and steel industry of Canada was given on pp. 452-456 of the 1922-23 Year Book.

20.—Iron Ore Shipments and Production of Pig Iron, Ferro-Alloys, and Steel Ingots and Castings, calendar years 1911-37.

NOTE.—For the years 1886-1910, see Canada Year Book, 1936, p. 373.

Calendar Year.	Ore Shipments from Canadian Mines.	Production of Pig Iron.				Production of Ferro-Alloys.	Production of Steel Ingots and Castings.
		Nova Scotia.	Quebec.	Ontario.	Canada.		
	short tons. ¹	long tons. ¹	long tons. ¹	long tons. ¹	long tons. ¹	long tons. ¹	long tons. ¹
1911.....	210,344	348,430	588	470,210	819,228	6,703	787,854
1912.....	215,883	379,459	Nil	526,422	905,881	6,995	855,072
1913.....	307,634	423,632	Nil	579,374	1,008,006	7,210	1,043,744
1914.....	244,854	202,725	Nil	496,529	699,254	6,718	739,858
1915.....	398,112	375,246	Nil	440,625	815,871	9,638	911,414
1916.....	275,176	419,692	Nil	624,287	1,043,979	25,556	1,275,222
1917.....	215,302	421,560	12,224	611,287	1,045,071	38,808	1,558,691
1918.....	211,608	371,313	28,598	667,545	1,067,456	39,914	1,672,954
1919.....	197,170	254,542	6,876	558,029	819,447	43,394	919,948
1920.....	129,072	296,869	7,887	668,812	973,568	27,781	1,100,622
1921.....	59,509	151,343	610	441,876	593,829	22,608	667,484
1922.....	17,971	120,769	Nil	262,198	382,967	21,602	480,127
1923.....	30,752	277,654	Nil	602,168	879,822	41,887	881,523
1924.....	Nil	177,078	Nil	415,971	593,049	35,034	659,767
1925.....	Nil	201,795	Nil	368,971	570,766	25,709	752,503
1926.....	Nil	250,238	Nil	507,079	757,317	57,050	776,262
1927.....	Nil	249,549	Nil	460,148	709,697	56,230	907,945
1928.....	Nil	302,756	Nil	734,971	1,037,727	44,482	1,234,719
1929.....	Nil	310,801	Nil	769,359	1,080,160	89,116	1,378,024
1930.....	Nil	212,636	Nil	534,542	747,178	65,223	1,009,578
1931.....	Nil	101,393	Nil	318,645	420,038	46,764	672,109
1932.....	Nil	30,697	Nil	113,433	144,130	16,161	339,346
1933.....	Nil	118,514	Nil	108,803	227,317	30,133	409,979
1934.....	Nil	133,860	Nil	271,635	404,995	29,940	757,782
1935.....	Nil	208,002	Nil	391,873	599,875	56,616	941,527
1936.....	Nil	257,148	Nil	421,083	678,231	76,284	1,115,779
1937 ²	Nil	320,318	Nil	578,537	898,855	75,288	1,401,011

¹ Although shipments of ore are expressed in short tons, the trade uses long tons as the quantity unit for pig iron, etc.

² Preliminary figures.

From Table 20 it will be observed that the tonnage of pig iron made in Canada in 1929 exceeded that of any previous year, while the 1929 quantities of steel ingots and castings made were exceeded only in the war years 1917 and 1918. Production declined greatly after 1929, but has been recovering since 1932. Production in the ferro-alloy industry (ferro-manganese, ferro-silicon, etc.) provides the chief source of exports of primary iron products from Canada.

Section 5.—Production of Non-Metallic Minerals.

Subsection 1.—Fuels.

COAL.

The fuel situation in Canada is somewhat anomalous, as, in spite of the enormous resources of coal in the country, about 50 p.c. of the consumption is imported. The Canadian coal areas are situated in the eastern and western provinces, while the areas of densest population and greatest industrial development in Ontario and Quebec are more easily and economically supplied with coal from the nearer coal-fields of Pennsylvania and Ohio.

Dominion Fuel Board.—The Board was created in 1922 to meet the need for a permanent organization responsible to the Government for a thorough and systematic study of the fuel situation and recurrent shortages experienced throughout Canada. It is composed of permanent members of the Dominion Civil Service and the staff of the Board constitutes a division in the Bureau of Mines and Geology, Department of Mines and Resources. In recent years the policy of the Government has been to extend the market for Canadian coal and to that end financial assistance in the form of subventions has been given to the coal industry since 1928, the Board being responsible for the administration of subvention payments. The amount of coal moved under these assisted rates has increased from 146,126 short tons in 1928 to 2,352,034 tons in 1936. Of the total moved under assisted rates in 1936, 1,677,096 tons were from Nova Scotia and 363,831 tons from Alberta and the Crowsnest district of British Columbia.

Coal Production.—During 1936 there was a further recovery from the low level of 1933. Production was, however, still 13.3 p.c. below that of 1928, the record year. The average price per ton, which had been \$3.63 in 1928, had dropped to \$3.02 in 1933, and was about the same in 1936. Nova Scotia was again the leading producer. The coal produced in Nova Scotia, New Brunswick, British Columbia, and Yukon is all classed as bituminous, while Alberta produces bituminous, sub-bituminous and lignite, and Saskatchewan and Manitoba lignite only. The division of the 1936 production among these classes is given in Table 25.

21.—Production of Coal in Canada, by Provinces, calendar years 1911-37.

NOTE.—For annual production from 1874-1910, by provinces, see 1911 Year Book, p. 419.

Year.	Nova Scotia.	New Brunswick.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.	Totals.	
								Quantity.	Value.
	short tons.	short tons.	short tons.	short tons.	short tons.	short tons.	short tons.	short tons.	\$
1911....	7,004,420	55,781	—	206,779	1,511,036	2,542,532	2,840	11,323,388	26,467,646
1912....	7,783,888	44,780	—	225,342	3,240,577	3,208,997	9,245	14,512,829	36,019,044
1913....	7,980,073	70,311	—	212,897	4,014,755	2,714,420	19,722	15,012,178	37,334,940
1914....	7,370,924	98,049	—	232,299	3,683,015	2,239,799	13,443	13,637,529	33,471,801
1915....	7,463,370	127,391	—	240,107	3,360,818	2,065,613	9,724	13,267,023	32,111,182
1916....	6,912,140	143,540	—	281,300	4,559,054	2,584,061	3,300	14,483,395	38,817,481
1917....	6,327,091	189,095	—	355,445	4,736,368	2,433,888	4,872	14,046,759	43,199,831
1918....	5,818,562	268,212	—	346,847	5,972,816	2,568,589	2,900	14,977,926	55,192,896
1919....	5,790,196	166,377	—	379,347	4,933,660	2,649,516	Nil	13,919,096	55,622,670
1920....	6,437,156	171,610	—	335,222	6,907,765	3,095,011	Nil	16,946,764	82,496,538
1921....	5,734,928	187,192	—	335,632	5,909,217	2,890,291	233	15,057,493	72,451,656
1922....	5,569,072	287,513	—	382,437	5,990,911	2,927,033	465	15,157,431	65,518,497
1923....	6,597,838	276,617	—	438,100	6,854,397	2,823,306	313	16,990,571	72,058,986
1924....	5,557,441	217,121	—	479,118	5,189,729	2,193,667	1,121	13,638,197	53,593,988
1925....	3,842,978	208,012	—	471,965	5,869,031	2,742,252	730	13,134,968	49,261,951
1926....	6,747,477	173,111	—	439,803	6,503,705	2,613,719	316	16,478,131	59,875,094
1927....	7,071,876	203,950	—	470,216	6,934,162	2,746,243	414	17,426,861	61,867,665
1928....	6,743,504	207,738	—	471,713	7,336,330	2,804,594	414	17,564,293	63,757,833
1929....	7,056,133	218,706	—	580,189	7,150,693	2,490,378	458	17,496,557	63,065,170
1930....	6,252,552	209,349	—	579,424	5,755,528	2,083,818	653	14,881,324	52,849,748
1931....	4,955,563	182,181	1,306 ¹	662,836	4,564,015	1,876,406	904	12,243,211	41,207,682
1932....	4,084,581	212,695	1,552	887,139	4,870,648	1,681,490	808	11,738,913	37,117,695
1933....	4,557,590	312,303	3,880	927,649	4,718,788	1,382,272	862	11,903,344	35,923,962
1934....	6,341,625	314,750	4,113	909,288	4,753,810	1,485,969	638	13,810,193	42,045,942
1935....	5,822,075	346,024	3,106	921,785	5,462,894	1,331,287	835	13,888,006	41,963,110
1936....	6,649,102	368,618	4,029	1,020,792	5,696,960	1,489,171	510	15,229,182	45,791,934
1937 ²	7,227,768	351,091	3,180	1,046,925	5,551,456	1,594,928	84	15,775,432	48,662,559

¹ First reported production from Manitoba.

² Preliminary figures.

22.—Imports into Canada of Anthracite, Bituminous, and Lignite Coal for Home Consumption, calendar years 1911-36.

NOTE.—Anthracite dust is included under anthracite coal. For previous years, see 1911 Year Book, p. 420.

Year.	Anthracite.		Bituminous.		Lignite.		Totals.	
	short tons.	\$	short tons.	\$	short tons.	\$	short tons.	\$
1911.....	4,020,577	18,794,192	10,538,315	20,498,399	—	—	14,558,892	39,292,591
1912.....	4,184,017	20,080,388	10,411,793	19,397,649	—	—	14,595,810	39,478,037
1913.....	4,642,057	22,034,839	13,559,896	25,914,280	—	—	18,201,953	47,949,119
1914.....	4,435,010	21,241,924	10,286,047	18,559,574	—	—	14,721,057	39,801,498
1915.....	4,072,192	18,753,980	8,393,710	9,591,625	—	—	12,465,902	28,345,605
1916.....	4,570,815	22,216,363	13,009,788	16,073,303	—	—	17,580,603	38,289,666
1917.....	5,320,198	28,109,586	15,637,262	42,452,771	—	—	20,857,460	70,562,357
1918.....	4,785,160	26,007,888	16,893,427	45,642,696	—	—	21,678,587	71,650,584
1919.....	4,937,095	31,595,694	12,356,162	29,565,105	—	—	17,293,257	61,160,799
1920.....	4,982,313	36,773,351	13,861,229	61,260,247	—	—	18,843,542	98,033,598
1921.....	4,553,820	40,293,639	13,748,242	48,631,095	—	—	18,302,062	88,924,734
1922.....	2,705,752	23,795,143	10,317,773	37,387,285	—	—	13,023,525	61,182,428
1923.....	5,165,382	46,457,962	15,822,240	49,899,099	2,331 ¹	12,846	20,989,953	96,369,907
1924.....	4,152,558	37,280,910	12,546,214	29,628,643	26,007	117,955	16,724,779	67,027,508
1925.....	3,782,557	32,096,509	12,548,460	26,974,340	18,653	87,832	16,349,670	59,158,681
1926.....	4,192,419	34,202,166	12,376,606	25,511,932	10,423	45,567	16,579,448	59,759,665
1927.....	4,107,854	31,282,371	14,568,671	30,457,884	10,829	44,254	18,687,364	61,784,509
1928.....	3,748,816	27,680,018	13,445,945	26,608,427	10,780	44,247	17,205,541	54,332,692
1929.....	4,019,917	28,809,792	14,170,138	27,140,968	14,108	62,508	18,204,163	56,013,268
1930.....	4,256,090	30,098,910	14,497,955	26,522,765	18,676	72,691	18,772,721	56,094,366
1931.....	3,162,317	21,067,025	9,952,280	15,732,710	6,410	29,603	13,121,007	36,829,338
1932.....	3,148,902	19,312,710	8,807,131	12,011,398	3,004	13,701	11,959,037	31,337,809
1933.....	3,015,571	17,610,091	8,185,759	10,501,924	2,707	10,176	11,204,037	28,122,191
1934.....	3,500,563	18,414,060	9,471,605	16,641,659	2,791	9,661	12,974,959	35,065,380
1935.....	3,442,835	17,445,102	8,630,686	15,867,107	5,246	19,040	12,078,767	33,331,249
1936.....	3,418,556	17,897,635	9,700,002	17,039,408	4,873	18,347	13,123,431	34,955,390

¹ First reported importation.

23.—Exports of Coal, the Produce of Canada, calendar years 1911-36.

NOTE.—For previous years, see 1911 Year Book, p. 421.

Year.	Quantity.		Value.	Year.	Quantity.		Value.
	short tons.	\$			short tons.	\$	
1911.....	1,500,639	1	1	1924.....	773,246	4,836,848	
1912.....	2,127,133	1	1	1925.....	785,910	4,329,173	
1913.....	1,562,020	3,951,351		1926.....	1,028,200	5,739,436	
1914.....	1,423,126	3,780,175		1927.....	1,113,330	5,890,259	
1915.....	1,766,543	5,406,058		1928.....	863,941	4,469,999	
1916.....	2,135,359	7,099,387		1929.....	842,972	4,375,328	
1917.....	1,733,156	7,387,192		1930.....	624,512	3,345,993	
1918.....	1,817,195	9,405,423		1931.....	359,853	1,909,922	
1919.....	2,070,050	12,438,885		1932.....	285,487	1,433,036	
1920.....	2,558,174	18,014,899		1933.....	259,233	1,188,225	
1921.....	1,987,251	13,896,370		1934.....	306,335	1,400,978	
1922.....	1,818,582	11,159,060		1935.....	418,391	1,906,647	
1923.....	1,654,406	10,661,399		1936.....	411,574	1,792,584	

¹ Not available.

Coal Consumption.—The sources of coal consumed in Canada in the calendar years 1911-36 are shown in Table 24, detailed figures of coal *made available for consumption* during 1936 are given in Table 25; the difference between the totals of the two tables in the same year is accounted for by the fact that coal received may be held in bond at Canadian ports and not "cleared for consumption" until required, while coal received in previous years may be taken out of bond (cleared for consumption) in a later year. Normally, the coal made available for consumption is greater than the

apparent domestic consumption, since coal is landed at Canadian ports and re-exported or ex-warehoused for ships' stores without being taken out of bond, but while remaining in bond at the port it is available for domestic consumption if required.

24.—Annual Consumption of Canadian and Imported Coal in Canada, by Quantities and Percentages, calendar years 1911-36.

NOTE.—For the years 1886-1910, see 1921 Year Book, p. 354.

Calendar Year.	Canadian Coal. ¹		Imported Coal "Entered for Consumption".				Grand Total.	Per Capita. ³
			From U.S.A.	From the United Kingdom.	Total. ²			
	short tons.	p.c.	short tons.	short tons.	short tons.	p.c.	short tons.	short tons.
1911.....	9,822,749	40.5	14,510,129	48,963	14,424,949	59.5	24,247,698	3.364
1912.....	12,385,696	46.0	14,557,124	38,668	14,549,104	54.0	26,934,800	3.645
1913.....	13,450,158	42.6	18,145,769	37,825	18,132,387	57.4	31,582,545	4.138
1914.....	12,214,403	45.5	14,687,853	33,101	14,637,920	54.5	26,852,323	3.408
1915.....	11,500,480	48.1	12,450,796	15,098	12,406,212	51.9	23,906,692	2.995
1916.....	12,348,036	41.3	17,576,202	4,401	17,517,820	58.7	29,865,856	3.733
1917.....	12,313,603	37.2	20,848,009	9,451	20,810,132	62.8	33,123,735	4.110
1918.....	13,160,731	37.8	21,674,826	3,761	21,611,101	62.2	34,771,832	4.268
1919.....	11,611,168	40.3	17,292,913	344	17,236,269	59.7	28,847,437	3.471
1920.....	14,025,566	42.9	18,752,981	Nil	18,668,741	57.1	32,694,307	3.821
1921.....	12,715,734	41.1	18,300,081	1,591	18,258,387	58.9	30,974,121	3.525
1922.....	13,044,352	50.2	12,255,555	765,980	12,962,189	49.8	26,006,541	2.916
1923.....	15,070,962	41.8	20,417,239	572,570	20,967,971	58.2	36,038,933	4.000
1924.....	12,529,358	42.8	16,405,344	317,112	16,714,143	57.2	29,243,501	3.198
1925.....	12,125,290	42.6	15,744,957	604,117	16,331,971	57.4	28,457,261	3.062
1926.....	15,086,296	47.7	16,204,405	287,299	16,565,555	52.3	31,651,851	3.349
1927.....	15,944,983	46.7	17,266,434	907,220	18,177,303	53.3	34,122,286	3.541
1928.....	16,487,807	50.0	15,830,688	682,755	16,515,582	50.0	33,003,389	3.356
1929.....	16,387,461	48.0	16,780,452	843,502	17,724,132	52.0	34,111,593	3.401
1930.....	14,052,671	43.3	16,971,933	1,144,861	18,412,039	56.7	32,464,710	3.180
1931.....	11,682,779	47.7	11,793,798	987,442	12,828,327	52.3	24,511,106	2.362
1932.....	11,212,701	49.0	9,889,866	1,727,716	11,654,492	51.0	22,867,193	2.177
1933.....	11,456,273	51.5	8,865,935	1,942,875	10,808,962	48.5	22,265,235	2.085
1934.....	13,236,406	51.1	10,580,710	1,981,116	12,651,168	48.9	25,887,574	2.392
1935.....	13,306,303	53.1	9,618,518	1,822,500	11,735,835	46.9	25,042,138	2.290 ⁴
1936.....	14,508,642	53.3	10,801,643	1,498,656	12,719,515	46.7	27,228,167	2.469

¹ The sum of Canadian coal mines' sales, colliery consumption, coal supplied to employees, and coal used in making coke, etc., less the tonnage of coal exported.

² Includes small tonnages from countries other than the United Kingdom and the United States. Deductions have been made from this column to take account of foreign coal re-exported from Canada and bituminous coal ex-warehoused for ships' stores.

³ Figures based on estimates of population given on p. 155.

⁴ Revised since the publication of the 1937 Year Book.

25.—Coal Output, Exports, Receipts from Other Countries, and Coal Made Available for Consumption in Canada during 1936.

NOTE.—For details by provinces, see the Bureau's annual report, "Coal Statistics for Canada".

Grade of Coal.	Canadian Coal.		Receipts from U.S.A.	Receipts from United Kingdom.	Receipts from Other Countries.	Coal Made Available for Consumption.
	Output.	Exported.				
	short tons.	short tons.	short tons.	short tons.	short tons.	short tons.
Anthracite.....	Nil	Nil	1,685,848	1,333,602	510,590	3,530,040
Bituminous.....	10,796,135	401,130	10,042,127	147,720	10,406	20,595,258
Sub-bituminous.....	566,235	Nil	Nil	Nil	Nil	566,235
Lignite.....	3,866,812	10,444	4,747	Nil	Nil	3,861,115
Totals.....	15,229,182	411,574	11,732,722	1,481,322	520,996¹	28,552,648

¹ Includes 369,415 tons from Germany, 88,702 tons from French Indo-China, 44,543 tons from Belgium, 16,266 tons from the Netherlands and 2,070 tons from other countries.

World Production.—The total estimated coal production of the world in 1936 amounted to about 1,420,000,000 long tons, an increase of 9·2 p.c. over the estimate for the previous year. Canada contributed 13,597,484 long tons or about 1·0 p.c. Table 26 shows the production of the British Empire and the chief foreign countries in units of 1,000 long tons during each of the years 1913 and 1921-36.

26.—Coal Produced in the Principal Countries of the World, 1913, 1921-36.

NOTE.—For corresponding figures for 1914-1920, see 1932 Year Book, p. 281. Figures in this table, except as indicated, are from the Imperial Institute's Statistical Summary.

BRITISH EMPIRE.

Calendar Year.	United Kingdom.	British India.	Canada. ¹	Australia.	New Zealand.	Union of South Africa.
	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.
1913.....	287,431	16,208	13,404	12,418	1,888	9,583
1921.....	163,251	19,303	13,444	12,878	1,809	10,645
1922.....	249,607	19,011	13,533	12,299	1,585	9,126
1923.....	276,001	19,658	15,170	12,634	1,970	11,075
1924.....	267,118	21,174	12,180	13,885	2,083	11,633
1925.....	243,176	20,904	11,723	14,503	2,115	12,127
1926.....	126,279	20,093	14,694	14,208	2,240	12,745
1927.....	251,232	22,082	15,560	14,978	2,367	12,382
1928.....	237,763	22,543	15,683	13,432	2,437	12,408
1929.....	257,907	23,419	15,622	12,106	2,536	12,813
1930.....	243,882	23,803	13,287	11,363	2,542	12,030
1931.....	219,459	21,716	10,931	10,595	2,158	10,709
1932.....	208,733	20,153	10,481	11,157	1,842	9,764
1933.....	207,112	20,284	10,623	11,672	1,821	10,545
1934.....	220,728	22,608	12,331	12,197	2,060	12,002
1935.....	222,252	23,017	12,400	13,109	2,115	13,360
1936 ²	228,454	22,611	13,597	14,415	2,140	14,607

FOREIGN COUNTRIES.

Calendar Year.	Saar.	Germany.	Belgium.	France.	Czecho-slovakia.	Poland.	Netherlands.	Japan.	United States.
	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.
1913....	3	274,264	22,474	40,188	4	4	1,843	20,973	508,893
1921....	3	255,148	21,401	37,916	32,174	7,717	3,978	25,944	452,139
1922....	3	262,878	20,868	43,118	23,385	24,300	4,525	27,420	425,849
1923....	3	178,191	22,554	46,981	27,380	35,686	5,249	28,633	587,407
1924....	3	239,494	22,986	58,065	35,066	31,793	5,575	29,801	510,369
1925....	12,785	267,970	22,726	47,249	30,663	28,677	6,943	31,121	519,527
1926....	13,465	280,656	24,913	51,607	32,491	35,139	8,677	31,089	591,720
1927....	13,381	299,511	27,130	52,021	33,106	37,560	9,374	33,177	535,625
1928....	12,900	312,092	27,108	51,601	34,459	40,047	10,941	33,445	514,369
1929....	13,365	332,560	26,514	54,109	38,465	45,686	11,552	34,479	541,232
1930....	13,027	284,148	26,982	54,163	33,098	36,968	12,160	31,007	479,385
1931....	11,187	247,971	26,615	51,280	30,544	37,699	12,818	27,661	394,406
1932....	10,273	223,796	21,075	46,511	26,394	28,412	12,677	27,717	321,040
1933....	10,394	232,752	24,900	47,223	25,191	26,957	12,471	32,999	342,118
1934....	11,139	257,990	25,972	47,889	25,451	28,797	12,237	36,658	371,907
1935....	3	287,445	26,087	47,248	25,769	28,110	11,775	34,354	375,292
1936 ³	3	315,027	27,433	45,418	27,737	29,291	12,688	37,466	436,456

¹ Dominion Bureau of Statistics figures.

² Preliminary figures.

³ Included with Germany.

⁴ None reported.

⁵ Included with France.

NATURAL GAS AND PETROLEUM.

Natural Gas.—The producing wells in Eastern Canada are in southwestern Ontario, and near Moncton, N.B. The principal producing fields in Alberta are the Turner Valley (about 35 miles southwest of Calgary), Medicine Hat, Viking (about 80 miles southeast of Edmonton), Redcliff, Foremost, Bow Island, and Wetaskiwin. Wainwright is supplied with gas from the Maple Leaf well in the Fabyan field. Near Lloydminster, in Saskatchewan, a well was brought into production during 1934 and is now supplying that town with gas. In 1936, Ontario was credited with about 56 p.c. of the total value but only 36 p.c. of the total quantity, while Alberta produced 41 p.c. by value and 62 p.c. of the total quantity. The production by provinces since 1920 is given in Table 27.

27.—Quantities and Values of Natural Gas Produced in Canada, by Provinces, calendar years 1920-37.

NOTE.—For the years 1892 to 1919, see "Mineral Production of Canada", 1923, p. 138.

Year.	New Brunswick.		Ontario.		Alberta.		Canada. ¹	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	M cu. ft.	\$	M cu. ft.	\$	M cu. ft.	\$	M cu. ft.	\$
1920.....	682,502	130,508	10,529,374	2,920,731	5,633,442	1,181,345	16,845,518	4,232,642
1921.....	708,743	139,375	8,422,774	3,080,130	4,945,884	1,374,599	14,077,601	4,594,164
1922.....	753,898	148,040	8,060,114	4,076,296	5,868,439	1,622,105	14,682,551	5,846,501
1923.....	640,300	126,068	8,128,413	4,066,244	7,191,670	1,692,246	15,960,583	5,884,618
1924.....	599,972	113,577	7,150,078	3,798,381	7,131,080	1,796,618	14,881,336	5,708,636
1925.....	639,235	122,394	7,143,962	3,958,006	9,119,500	2,752,545	16,902,897	6,833,005
1926.....	648,316	128,300	7,764,996	4,409,593	10,794,697	3,019,221	19,208,209	7,557,174
1927.....	630,755	124,637	7,311,215	4,331,780	13,434,621	3,586,533	21,376,791	8,043,010
1928.....	660,981	324,344	7,632,800	4,535,312	14,288,605	3,754,466	22,582,586	8,614,182
1929.....	678,456	333,002	8,586,475	4,959,695	19,112,931	4,684,247	28,378,462	9,977,124
1930.....	661,975	325,751	7,965,761	5,034,828	20,748,583	4,929,226	29,376,919	10,289,985
1931.....	655,891	323,184	7,419,534	4,635,497	17,798,698	4,067,893	25,874,723	9,026,754
1932.....	662,452	326,191	7,366,154	4,719,297	15,370,968	3,853,794	23,420,174	8,899,462
1933.....	618,033	302,706	7,166,659	4,523,085	15,352,811	3,886,263	23,138,103	8,712,234
1934.....	623,601	306,005	7,682,851	4,741,368	14,841,491	3,707,276	23,162,324	8,759,652
1935.....	615,454	303,886	8,158,825	4,938,084	16,060,349	4,113,436	24,910,786	9,363,141
1936.....	606,246	298,819	10,006,743	6,052,294	17,407,820	4,376,720	28,113,348	10,762,243
1937 ²	576,671	283,922	11,504,502	6,902,701	17,425,000	4,517,666	29,599,198	11,738,822

¹ Totals for Canada include small productions in Manitoba, Saskatchewan, and Northwest Territories.

² Preliminary figures.

Petroleum.—The Turner Valley field in Alberta is the principal source of production in Canada. The earlier wells in this field give a wet gas from which a very high grade of crude naphtha and casinghead gasoline is obtained. However, in June, 1936, a well on the west flank of the southern end of the Turner Valley field, completed with a depth of 6,828 feet, was brought into production with a heavier grade (44° A.P.I.) of crude oil than that formerly derived from the Turner Valley. The successful completion of this well resulted in much drilling activity on the west flank of the field and other producing wells were completed. Furthermore, the flow of oil was greatly increased by acidation of a number of these wells. The result of these developments has been a rapid rise in the production of the Turner Valley field during 1937. The Red Coulee field in southern Alberta, near the International Boundary, began to yield some petroleum in 1929, while a small production has been obtained for a number of years in the Wainwright field, about 120 miles east of Edmonton. Production from wells near Fort Norman

on the lower Mackenzie river increased from 910 barrels in 1932 to 5,399 barrels in 1936. This oil is treated locally in a small refining plant and is used to a large extent in connection with mining operations in the Great Bear Lake area.

The principal Ontario oil fields are situated in the southwestern peninsula between lake Huron and lake Erie. The maximum production of these fields was reached in the '90's and has since declined. New Brunswick's small production comes from the Stony Creek field, near Moncton. For the production by provinces in 1936, see Table 5 of this chapter.

28.—Quantities and Values of Crude Petroleum Produced in Canada, calendar years 1911-37.

NOTE.—For figures for the years 1886-1910, inclusive, see p. 377 of the 1933 Year Book.

Year.	Quantity.	Value.	Year.	Quantity.	Value.	Year.	Quantity.	Value.
	bbl. ¹	\$		bbl. ¹	\$		bbl. ¹	\$
1911.....	291,092	357,073	1920....	196,251	822,235	1929....	1,117,368	3,731,764
1912.....	243,336	345,050	1921....	187,541	641,533	1930....	1,522,220	5,033,820
1913.....	228,080	406,439	1922....	179,068	611,176	1931....	1,542,573	4,211,674
1914.....	214,805	343,124	1923....	170,169	522,018	1932....	1,044,412	3,022,592
1915.....	215,464	300,572	1924....	160,773	467,400	1933....	1,145,333	3,138,791
1916.....	198,123	392,284	1925....	332,001	1,250,705	1934....	1,410,895	3,449,162
1917.....	213,832	542,239	1926....	364,444	1,311,665	1935....	1,446,620	3,492,188
1918.....	304,741	885,143	1927....	476,591	1,516,043	1936....	1,500,374	3,421,767
1919.....	240,466	736,324	1928....	624,184	2,035,300	1937 ² ...	2,978,268	5,370,981

¹ The barrel=35 Imperial gallons.

² Preliminary figures.

Subsection 2.—Other Non-Metallic Minerals.

Asbestos.—Canada produces more asbestos than any other country. The value of the annual output of asbestos increased from less than \$25,000 in 1880 to \$14,792,201 in 1920 and \$13,172,581 in 1929. Owing to trade depression, production was much curtailed from 1929 to 1932, as will be seen in Table 29. However, since 1932 production has shown a distinct improvement. The Imperial Institute's estimate for the world total of asbestos production in 1936 is 500,000 long tons. In 1936 Canada produced about 271,777 long tons, or more than half the world total, while other leading countries with their production in long tons were: Russia, 123,141; Southern Rhodesia, 50,309; Union of South Africa, 21,812; United States, 9,683; and Cyprus, 9,202.

The Eastern Townships of Quebec have for many years been the most productive asbestos-mining area in the world. The most important deposits are: at Black Lake, in Coleraine township; at Thetford and Robertsonville, in Thetford township; at East Broughton, in Broughton township; and at Danville, in Shipton township. The veins of chrysotile asbestos vary in width from $\frac{1}{4}$ inch to $\frac{1}{2}$ inch and occasionally fibre has been obtained several inches in length. The fibre is of good quality and well adapted for spinning. Both open-cut and underground methods of mining are employed throughout the Canadian asbestos fields. Nearly all the mining companies have installed machinery for the crushing, fibrizing, screening and grading of the mine product. Since 1935 development work has been con-

ducted on an asbestos property at Rahn lake, Bannockburn township, Ontario; the fibre in this deposit is reported as being of high quality and commercial shipments were commenced in 1937.

There are 13 plants in Canada which manufacture asbestos products, including the following commodities: asbestos paper and mill board; asbestos roofing of all kinds; asbestos rigid shingles; asbestos building materials; asbestos cellular and sponge-felted pipe insulation; insulating sheets and blocks; asbestos yarn; asbestos dryer felts; asbestos brake linings and clutch facings (woven on special looms); and asbestos packings for steam, oil, and hydraulic operations.

29.—Quantities and Values of Asbestos Produced in Canada, calendar years 1911-37.

NOTE.—Figures for the years 1896-1910 are given in the 1911 Year Book, p. 424.

Year.	Quantity.	Value.	Year.	Quantity.	Value.	Year.	Quantity.	Value.
	tons.	\$		tons.	\$		tons.	\$
1911.....	127,414	2,943,108	1921....	92,761	4,906,230	1930....	242,114	8,390,163
1912.....	136,301	3,137,279	1922....	163,706	5,552,723	1931....	164,296	4,812,886
1913.....	161,086	3,849,925	1923....	231,482	7,522,506	1932....	122,977	3,039,721
1914.....	117,573	2,909,806	1924....	225,744	6,710,830	1933....	158,367	5,211,177
1915.....	136,842	3,574,985				1934....	155,980	4,936,326
1916.....	154,149	5,228,869	1925 ¹	273,524	8,977,546	1935....	210,467	7,054,614
1917.....	153,781	7,230,383	1926....	279,403	10,099,423	1936....	301,287	9,958,183
1918.....	158,259	8,970,797	1927....	274,778	10,621,013	1937 ²	410,026	14,505,791
1919.....	159,236	10,975,369	1928....	273,033	11,238,360			
1920.....	199,573	14,792,201	1929....	306,055	13,172,581			

¹ The quantities and values of sand, gravel, and rock separated as a by-product in milling asbestos are included in the totals for 1924 and previous years, but are excluded in later years. ² Preliminary figures.

Gypsum.—Many large deposits of gypsum occur throughout Canada, but the production is chiefly from Hants, Inverness, and Victoria Counties, Nova Scotia; Hillsborough, New Brunswick; Hagersville and Caledonia, Ontario; Gypsumville and Amaranth, Manitoba; and Falkland, British Columbia. The Hillsborough deposit of gypsum in New Brunswick is of very high grade. The greater part of Canada's production is exported in crude form from the Nova Scotia deposits, which are conveniently situated for ocean shipping and during recent years account for about 80 p.c. of the total Canadian production. Production of gypsum in Canada reached its highest point in 1928 with 1,246,368 tons valued at \$3,743,648. Production during 1936 was 833,822 tons valued at \$1,278,971, and preliminary figures for 1937 are 1,042,239 tons valued at \$1,536,587. The production by provinces during 1936 is shown in Table 5, p. 350.

Salt.—The greater part of the Canadian salt production comes from wells located in southwestern Ontario, but the Malagash deposits in Nova Scotia have shown an increasing production in recent years. The first production of commercial importance in Manitoba was recorded in 1932 and for Saskatchewan in 1933. Commercial shipments were recommenced in 1937 from deposits near McMurray in Alberta. An important part of Canadian salt production (42 p.c. in 1936) is used in the form of brine in chemical industries for the manufacture of caustic soda, liquid chlorine and other chemicals.

The Canadian production during the present century has shown fairly steady growth from 59,428 tons in 1901 to 91,582 in 1911, 164,658 in 1921, 262,547 in 1926 and a record at that time of 330,264 tons in 1929. Production declined to 259,047 tons in 1931 but has since recovered to 391,316 tons valued at \$1,773,144 in 1936. (See Tables 2 and 5 of this chapter.) The estimate for 1937 is 459,027 tons, valued at \$1,799,465.

Section 6.—Production of Clay Products and Other Structural Materials.

Production of these materials is naturally dependent upon the activity of the construction industry in Canada. Building and construction work fluctuates widely with business cycles and during the recent depression dropped to a very low ebb. Under these circumstances, the production of clay products, cement, gravel and stone was severely curtailed. Some uncompleted large engineering construction operations and governmental relief projects eased the decline in the early years of the depression but the downward trend was still evident in 1933. With a slight recovery of construction activities since then (see Chapter XV) there has been a moderate increase in the production of the chief structural materials, the total estimated value of production being \$34,401,669 in 1937 as compared with \$16,696,687 in 1933.

Brick and Tile.—Although the brick and tile industry is established in every province of the Dominion, production is naturally greatest near the chief centres of population, that is, in Ontario and Quebec. Here the widespread clays of glacial and post-glacial age occurring over considerable areas of the St. Lawrence Lowlands have furnished the materials for numerous brick and tile industries. Production fluctuates with building activity and reached its highest point in the year 1912. Since that time the gradual substitution of steel and reinforced concrete for brick has reduced the production of brick so that, while the value of construction undertaken in 1928 or 1929 is estimated to have exceeded that of 1912, the quantity of brick produced in the later years was only about half that of 1912. On the other hand, as will be seen from Table 30, the production and consumption of cement in 1929 greatly exceeded that of 1912 or 1913. The production of building brick of various types in 1935 and 1936 is shown in Table 2 of this chapter, while the production by provinces in 1936 is given in Table 5. The estimated value of all clay products made in 1937 was \$4,589,933.

Cement.—The cement industry in Canada began with the manufacture of hydraulic or natural rock cement. The first production was probably at Hull, Quebec, between 1830 and 1840. The manufacture of Portland cement began about 1889. Owing to its superiority in uniformity and strength, it soon superseded the older product. Portland cement consists of an accurately proportioned mixture of lime, silica, and alumina. The lime is usually furnished by limestone and the silica and alumina by clay or shale. The cement industry has naturally become established where these materials are situated and where fuel supplies and transportation are readily available. The largest production is in Quebec and Ontario, although there are also active plants in Manitoba, Alberta, and British Columbia. As may be seen from Table 30, production declined greatly from 1929 to 1933, but has recovered somewhat since then. Production by provinces in 1936 is given in Table 5 of this chapter.

30.—Production,¹ Imports, Exports, and Apparent Consumption of Portland Cement, by Quantities and Values, calendar years 1910-37.

Year.	Production. ¹		Imports.		Exports.		Apparent Consumption.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	bbl. ²	\$	bbl. ²	\$	bbl. ²	\$	bbl. ²	\$
1910.....	4,753,975	6,412,215	349,415	468,395	3	12,914	5,103,285	6,867,696
1911.....	5,692,915	7,644,537	669,532	840,986	3	4,067	6,354,831	8,481,456
1912.....	7,132,732	9,106,556	1,434,413	1,969,529	3	2,436	8,567,145	11,073,649
1913.....	8,658,805	11,019,418	254,093	409,303	4	1,736	8,912,898	11,426,985
1914.....	7,172,480	9,187,924	98,022	147,158	3	2,223	7,270,502	9,332,859
1915.....	5,681,032	6,977,024	28,190	40,426	3	5,161	5,709,222	7,012,289
1916.....	5,369,560	6,547,728	20,596	31,621	3	2,424	5,390,156	6,576,925
1917.....	4,768,488	7,724,246	8,580	19,646	3	16,857	4,777,068	7,727,035
1918.....	3,591,481	7,076,503	5,913	19,851	3	13,752	3,597,394	7,082,602
1919.....	4,995,257	9,802,433	14,066	51,314	177,506	465,954	4,831,817	9,387,793
1920.....	6,651,980	14,798,070	32,963	112,466	835,667	2,193,626	5,849,276	12,716,910
1921.....	5,752,885	14,195,143	12,057	75,670	242,345	650,658	5,522,597	13,620,155
1922.....	6,943,972	15,438,481	30,914	83,037	425,137	699,738	6,549,749	14,821,780
1923.....	7,543,589	15,064,661	17,697	75,294	493,751	824,811	7,067,535	14,315,144
1924.....	7,498,624	13,398,411	27,672	69,320	153,520	213,845	7,372,776	13,253,886
1925.....	8,116,597	14,046,704	21,849	63,667	997,915	1,498,495	7,140,531	12,611,276
1926.....	8,707,021	13,013,283	21,114	77,866	285,932	358,231	8,442,203	12,732,918
1927.....	10,065,865	14,391,937	19,354	87,541	249,694	308,144	9,835,525	14,171,334
1928.....	11,023,928	16,739,163	34,047	146,164	267,325	340,624	10,790,650	16,544,703
1929.....	12,284,081	19,337,235	55,980	189,169	234,111	252,955	12,105,950	19,273,449
1930.....	11,032,538	17,713,067	143,436	569,848	198,736	212,071	10,977,238	18,070,844
1931.....	10,161,658	15,826,243	38,392	143,491	114,064	124,267	10,085,986	15,845,467
1932.....	4,498,721	6,930,721	21,351	58,092	53,333	38,921	4,466,739	6,949,892
1933.....	3,007,432	4,536,935	19,119	37,768	52,531	47,369	2,974,020	4,527,334
1934.....	3,783,226	5,667,946	14,341	45,548	70,046	55,181	3,727,521	5,658,313
1935.....	3,648,086	5,580,043	17,738	60,079	55,607	44,365	3,610,217	5,595,757
1936.....	4,508,718	6,908,192	39,867	107,180	68,929	56,909	4,479,656	6,958,463
1937 ⁴	6,168,971	9,095,867	61,082	134,113	72,568	82,978	6,157,485	9,147,002

¹ 'Production' as used here means quantity and value of sales.
or 3½ cwt.

³ Not available.

⁴ Preliminary figures.

² The barrel of cement = 350 lb.

Sand and Gravel, and Stone.—The mining, Metallurgical, and Chemical Branch of the Bureau of Statistics presents details of production and organization of the stone industry separately from that of sand and gravel, but for the sake of brevity they are here discussed together. However, the figures of stone production shown do not include the limestone used to produce lime and cement, nor the quartz and other rock minerals, which are shown separately in Table 2, pp. 344-345. Production of these materials increased greatly up to the recent world depression. The expansion in the stone industry was chiefly in crushed stone. Thus a production of crushed stone in 1922 of 3,044,399 tons had increased by 1930 to 8,062,330 tons, while in the same period the production of sand and gravel increased from 11,666,374 tons to 28,547,511 tons. During the depression the output contracted sharply, but since 1933 there has been some recovery. Among the developments in Canada that resulted in increased production of these materials prior to the depression may be mentioned: (1) the tendency for brick to be replaced by reinforced concrete, cement blocks, etc., as indicated on p. 381 by a decline in brick production and an increase in that of cement; (2) the vast improvement during the past decade in the mileage and character of roads and highways in Canada; and (3) the improvement of railway roadbeds.

The provincial distribution of the 1936 production of stone, sand and gravel is shown in Table 5, p. 351, while the chief purposes for which these materials were produced are shown in Table 31 below.

31.—Production of Sand and Gravel, and Stone in Canada, Showing the Principal Purposes, calendar years 1934-36.

Material and Purpose.	1934.		1935.		1936.	
	Quantity.	Gross Value.	Quantity.	Gross Value.	Quantity.	Gross Value.
	tons.	\$	tons.	\$	tons.	\$
Sand—						
Moulding sand.....	13,229	13,415	13,213	14,674	16,725	16,951
For building, concrete, roads, etc....	686,631	209,002	787,412	264,435	956,502	362,542
Other.....	49,519	12,391	44,082	10,609	15,096	5,795
Sand and Gravel—						
For railway ballast.....	1,454,618	266,292	2,267,195	415,092	6,318,681	1,054,703
For concrete, roads, etc.....	12,418,408	3,411,751	17,531,047	5,357,331	14,336,640	5,216,942
Crushed gravel.....	231,754	122,626	570,540	327,299	480,516	264,466
Totals, Sand and Gravel.....	14,854,159	4,035,477	21,213,489	6,389,440	22,124,160	6,921,399
Stone—						
Building.....	52,665	490,095	200,899	1,258,741	42,335	714,616
Monumental and ornamental.....	9,359	316,366	15,163	342,950	8,975	281,656
Limestone for agriculture.....	81,564	142,126	87,884	134,716	94,031	116,397
Chemical Uses—						
Flux.....	237,362	177,015	269,629	186,858	279,299	187,240
Pulp and paper.....	149,997	144,362	160,870	165,784	197,957	197,523
Other.....	102,221	126,052	107,300	131,067	137,951	168,834
Rubble and riprap.....	175,405	108,192	314,484	198,537	475,845	250,581
Crushed.....	3,229,388	2,486,463	3,132,384	2,723,191	3,702,153	3,043,407
Totals, Stone¹.....	4,077,016	4,152,329	4,316,818	5,303,234	4,981,665	5,128,739

¹ Totals include minor items not specified.

The quantities and values of stone produced, given in the table above, represent only the production of those establishments which actually quarry their own stone and are exclusive of the products of the stone-dressing industry comprising those establishments which buy rough stone and dress, polish or finish it; although dressing operations are frequently carried on right at the quarry and to that extent cannot be separated from the primary production. Of the total quantity of stone produced in 1936 about 75 p.c. was limestone, 19 p.c. granite, less than 6 p.c. sandstone and less than 0.5 p.c. marble. The average value per ton was \$0.84 for limestone, \$1.40 for granite, \$1.74 for sandstone and \$7.42 for marble. Prices averaged lower in 1936 than in 1935 because a larger proportion of all stone except marble was used for riprap and crushed stone. The marble was used chiefly for stucco dash, in pulp and paper mills and other industrial processes, and for poultry grit and building stone. Large quantities of limestone were used for fluxing and other chemical purposes, but by far the largest part of all stone except marble was used as crushed stone.

CHAPTER XIII.—WATER POWERS.

The freshwater area of Canada is officially estimated at 228,307 square miles—an area nearly twice as large as the whole land area of the British Isles, and certainly larger than the freshwater area of any other country in the world. As many parts of this well-watered country are situated at considerable heights above sea-level, there are great sources of potential energy in the rapids and waterfalls of the rivers conveying the waters from these areas to the sea. Water power, therefore, is among the chief natural resources of Canada, and its development has in recent years contributed materially to swell the volume of Canadian production.

This Water Power chapter of the Year Book is divided into three sections: the first describes our water powers, their development and use in industry; the second deals with the Canadian central electric station industry, which is based almost wholly upon hydro-electric power; the third treats of the public ownership of hydro-electric power in Ontario, the chief manufacturing area, and also describes the policies of the Hydro-Electric or Power Commissions in other provinces.

Section 1.—The Water Powers of Canada.*

The progress of civilization in its material aspects may be measured by the extent to which the resources of nature are adapted to the uses of mankind. These resources yield, in the first instance, raw materials such as coal and iron, cotton and lumber, hides and wool, which enter into so many things that they are spoken of as basic commodities. Energy, until comparatively recently, was largely secured by the combustion of coal and was therefore looked upon as a secondary product, whereas, when produced from falling water, it is just as much a primary product as coal itself. Energy now enters so largely into the scheme of modern existence that it is recognized as a basic element. Statistics concern themselves with kilowatt hours of electric energy produced just as with the production of pig iron, coal or cotton, and take note of undeveloped water power as being a source of raw material just as important as uncut forests or untapped oil fields. The relationship of power to production is now so vital, that those associated with power development in any country are keenly interested in methods and progress in other parts of the world. To facilitate a study of world power conditions, three Plenary World Power Conferences have already been held to consider the technical, economic, and statistical aspects of power development. The latest of these Conferences was held at Washington in September, 1936, and was composed of representatives of more than fifty member States. Following the first and second Conferences, sectional meetings were held to consider special problems related to the production and supply of energy.

Canada is richly endowed with water-power resources and is in the forefront as regards their utilization. In fact, practically every large industrial centre throughout the Dominion is now served with hydro-electric energy and has within practical transmission distance substantial reserves for the future. More than 95 p.c. of the

* By J. T. Johnston, Controller, Dominion Water and Power Bureau, Surveys and Engineering Branch, Department of Mines and Resources.

total main-plant equipment of the central electric stations of Canada is hydro-power, and this equipment generates more than 98 p.c. of the total electrical output. Indeed, water power is a mainspring of industrial progress in the central provinces, which have no indigenous coal supplies. Table 1 shows the provincial distribution of available and developed power in Canada at Dec. 31, 1937.

1.—Available and Developed Water Power in Canada, by Provinces, Dec. 31, 1937.

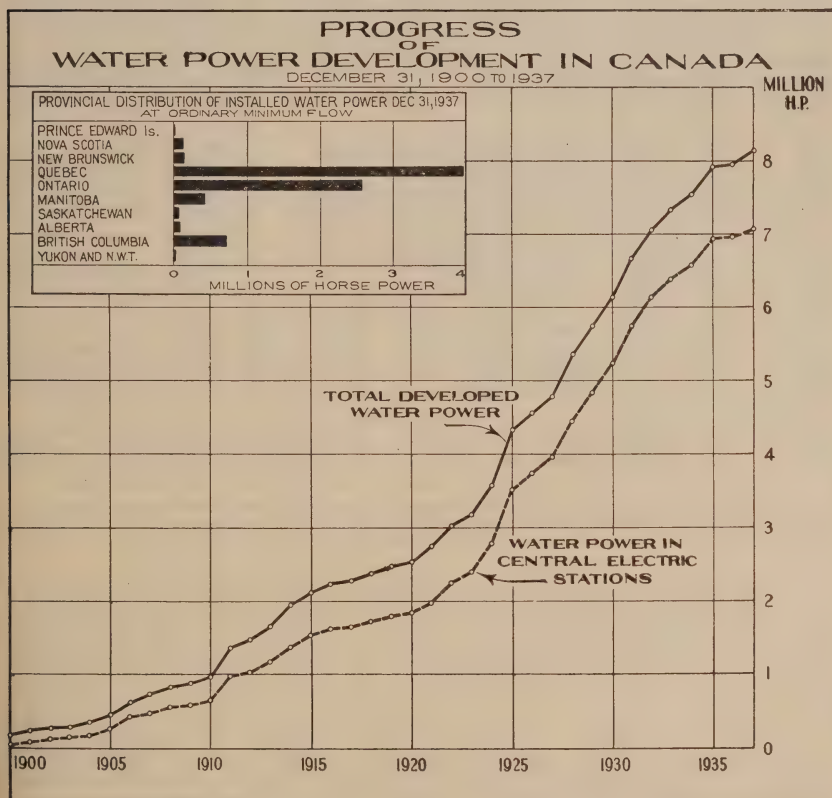
Province.	Available 24-Hour Power at 80 p.c. Efficiency.		Turbine Installation.
	At Ordinary Minimum Flow.	At Ordinary Six-Month Flow.	
	h.p.	h.p.	h.p.
Prince Edward Island.....	3,000	5,300	2,439
Nova Scotia.....	20,800	128,300	123,437
New Brunswick.....	68,600	169,100	133,681
Quebec.....	8,459,000	13,064,000	3,999,686
Ontario.....	5,330,000	6,940,000	2,577,380
Manitoba.....	3,309,000	5,344,500	405,325
Saskatchewan.....	542,000	1,082,000	61,035
Alberta.....	390,000	1,049,500	71,597
British Columbia.....	1,931,000	5,103,500	719,972
Yukon and Northwest Territories.....	294,000	731,000	18,199
Canada.....	20,347,400	33,617,200	8,112,751

The figures of available power in the above table are based upon rapids, falls, and power sites of which the actual existent drop, or the head of possible concentration, is definitely known or at least well established. Innumerable rapids and falls of greater or smaller power capacity, not as yet recorded, are scattered on rivers and streams from coast to coast and will only become available for tabulation as more detailed survey work is undertaken and completed. This is particularly true of the less explored northern districts. Nor is any consideration given to the power concentrations which are feasible on rivers and streams of gradual gradient, where economic heads may be created by the construction of power dams, excepting only at points where definite studies have been carried out and the results made matters of record.

The turbine installation in the above table represents the actual water wheels installed throughout the Dominion, but these figures should not be placed in direct comparison with the available power figures for the purpose of deducing therefrom

the percentage of the available water-power resources developed to date. The actual water-wheel installation throughout the Dominion averages 30 p.c. greater than corresponding maximum available power figures calculated at ordinary six-month flow. The figures quoted above, therefore, indicate that the "at present recorded water-power resources" of the Dominion will permit of a turbine installation of about 43,700,000 h.p. In other words, the present turbine installation represents only slightly more than $18\frac{1}{2}$ p.c. of the present recorded water-power resources and the figures of available power in Table 1 may be said to represent the minimum water-power possibilities of the Dominion.

Growth of Water-Power Development.—The commencement of the long distance transmission of electricity at the beginning of the present century resulted in the extensive development of hydro-electricity for distribution over wide areas. The growth of installation during the period from 1900 to 1937 is shown, by provinces, in Table 2.



2.—Hydraulic Turbine Horse-Power Installed in Canada, by Provinces, as at Dec. 31, 1900-37.

Year.	P.E.I.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total. ¹
	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
1900....	1,521	19,810	4,601	82,864	53,876	1,000	—	280	9,366	173,323
1901....	1,581	20,132	4,601	139,149	62,788	1,000	—	280	9,366	238,902
1902....	1,641	21,944	4,636	152,783	77,022	1,000	—	280	13,266	272,577
1903....	1,641	23,518	7,427	164,258	79,909	1,000	—	355	20,346	298,459
1904....	1,641	26,228	8,459	179,468	111,697	1,000	—	355	26,396	355,249
1905....	1,663	26,563	8,594	183,799	202,896	1,000	—	355	29,334	454,209
1906....	1,701	26,952	10,134	205,211	279,028	38,800	—	355	45,816	608,002
1907....	1,701	27,977	10,172	242,582	345,404	38,800	—	355	58,570	727,646
1908....	1,701	28,419	10,407	269,814	410,079	38,800	—	655	58,610	820,580
1909....	1,734	29,381	10,507	305,556	437,613	38,800	—	655	63,048	890,489
1910....	1,760	31,476	11,197	334,763	490,821	38,800	30 ²	655	64,474	977,171
1911....	1,760	32,226	13,635	468,977	634,263	64,800	30	14,855	119,393	1,363,134
1912....	1,785	32,773	15,185	513,635	659,190	64,800	30	15,035	165,838	1,481,466
1913....	1,825	32,964	15,185	551,871	751,545	64,800	30	32,835	224,680	1,688,930
1914....	1,843	33,469	15,380	664,139	858,534	78,850	30	33,110	252,690	1,951,244
1915....	1,942	33,596	15,405	803,786	871,309	78,850	30	33,110	254,265	2,105,492
1916....	1,962	33,656	15,480	836,394	921,158	78,850	30	33,110	288,330	2,222,169
1917....	1,989	34,051	16,251	856,769	955,955	78,850	30	33,122	297,169	2,287,385
1918....	2,198	34,318	16,311	905,303	981,313	85,325	35	33,122	307,533	2,378,575
1919....	2,233	35,193	19,126	936,903	1,036,550	85,325	35	33,122	308,364	2,470,050
1920....	2,233	37,623	21,976	955,090	1,057,422	85,325	35	33,122	309,534	2,515,559
1921....	2,252	48,908	30,976	1,050,338	1,165,940	99,125	35	33,122	310,262	2,754,157
1922....	2,274	49,142	42,051	1,099,404	1,305,536	134,025	35	33,122	329,557	3,008,345
1923....	2,274	50,331	43,101	1,135,481	1,396,166	162,025	35	33,122	356,118	3,191,852
1924....	2,274	65,572	44,521	1,312,550	1,595,396	162,025	35	34,532	360,492	3,590,596
1925....	2,274	65,637	42,271	1,749,975	1,802,562	183,925	35	34,532	443,852	4,338,262
1926....	2,274	66,147	47,131	1,886,042	1,808,246	227,925	35	34,532	463,852	4,549,383
1927....	2,274	68,416	47,131	2,069,518	1,832,655	255,925	35	34,532	475,252	4,798,917
1928....	2,439	74,356	67,131	2,387,118	1,903,705	311,925	35	34,532	554,792	5,349,232
1929....	2,439	109,124	112,631	2,595,430	1,952,055	311,925	35	70,532	559,792	5,727,162
1930....	2,439	114,224	133,681	2,718,130	2,088,055	311,925	42,035	70,532	630,792	6,125,012
1931....	2,439	111,999	133,681	3,100,330	2,145,205	390,925	42,035	70,532	655,992	6,666,337
1932....	2,439	112,167	133,681	3,357,320	2,208,105	390,925	42,035	71,597	713,792	7,045,260
1933....	2,439	112,167	133,681	3,493,320	2,355,105	390,925	42,035	71,597	717,602	7,332,070
1934....	2,439	116,367	133,681	3,703,320	2,355,755	390,925	42,035	71,597	717,717	7,547,035
1935....	2,439	116,367	133,681	3,853,320	2,560,155	392,825	42,035	71,597	718,497	7,909,115
1936....	2,439	120,667	133,681	3,853,320	2,561,905	392,825	42,035	71,597	718,922	7,945,590
1937....	2,439	123,437	133,681	3,999,686	2,577,380	405,325	61,035	71,597	719,972	8,112,751

¹ Includes totals for Yukon. Turbine horse-power in Yukon was 5 from 1900 to 1906, 2,085 in 1907, 2,095 in 1908, 3,195 in 1909 and 1910, 13,195 from 1911 to 1913, 13,199 from 1914 to 1934, and 18,199 from 1935 to 1937.

² First reported installation in Saskatchewan.

Distribution of Developed Water Power.—An analysis is made in Table 3 of the distribution of developed water power among central electric stations, pulp and paper mills and other industries. The extent to which pulp and paper manufacturing is dependent on water power is clearly shown by the figures there given, which indicate that 8.4 p.c. of the developed power is installed by pulp and paper companies, in comparison with 4.4 p.c. developed by all other industries (excluding central electric stations). The pulp and paper industry also purchases a large amount of power from the central electric stations, and about 95 p.c. of its machinery is driven by water power. The bulk of the water power used in other industries is developed by central electric stations, converted into electricity and delivered to the various industrial plants.

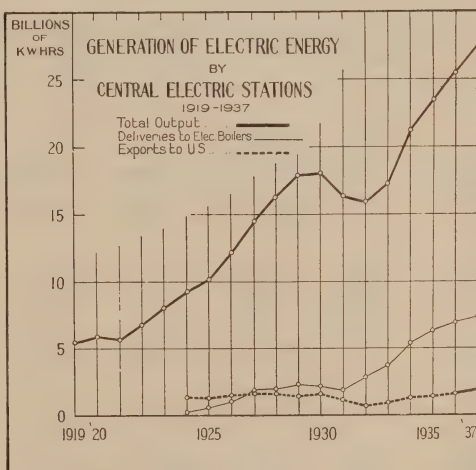
3.—Developed Water Power in Canada: Distribution, by Provinces and Industries, and per 1,000 Population, as at Dec. 31, 1937.

Province.	Turbine Installation in H.P.				Population, June 1, 1937. ⁴	Total Installation per 1,000 Population.
	In Central Electric Stations. ¹	In Pulp and Paper Mills. ²	In Other Industries. ³	Total.		
Prince Edward Island.....	376	Nil	2,063	2,439	93,000	26
Nova Scotia.....	88,502	19,348	15,587	123,437	542,000	228
New Brunswick.....	104,960	19,778	8,943	133,681	440,000	304
Quebec.....	3,570,375	293,026	136,285	3,999,686	3,135,000	1,275
Ontario.....	2,228,623	240,880	109,877	2,577,380	3,711,000	694
Manitoba.....	405,325	Nil	Nil	405,325	717,000	565
Saskatchewan.....	61,000	Nil	35	61,035	939,000	65
Alberta.....	70,320	Nil	1,277	71,597	778,000	92
British Columbia.....	547,160	105,950	66,862	719,972	751,000	960
Yukon and Northwest Ter- ritories.....	Nil	Nil	18,199	18,199	14,000	1,300
Canada.....	7,074,641	678,982	359,128	8,112,751	11,120,000	730
Percentages of total instal- lation.....	87.2	8.4	4.4	100.0	-	-

¹ Includes only hydro-electric stations which develop power for sale. ² Includes only water power actually developed by pulp and paper companies. In addition to this turbine installation, pulp and paper companies have motor equipment for operation by hydro-electricity purchased from the central electric stations aggregating more than 1,103,000 h.p., making a total of more than 1,785,000 h.p. actually developed for the manufacture of pulp and paper. Large amounts of electricity are also purchased for use in electric boilers. ³ Includes only water power actually developed in connection with industries other than the central electric station and pulp and paper industries. These industries also purchase power from the central electric stations. ⁴ Estimated by the Dominion Bureau of Statistics.

Section 2.—Central Electric Stations.*

The rapid growth of the central electric station industry has been stimulated by the large demand for power from the manufacturing industries, particularly pulp and paper plants, and from the domestic and commercial light customers, and also by the many improvements in generating and transmitting equipment and in electrical appliances and motors. In Table 4 will be found statistics of the number of central electric stations, capital invested, revenue from sale of power, total horse-power, kilowatt hours generated and number of customers for the 20 years ended 1936, together with the number of persons employed and the amount expended for salaries and wages. The total output for 1936 amounted to 25,402,282,000 kilowatt hours and, based on preliminary figures from the large stations, the total production in 1937 is estimated at 27,600,000,000 kilowatt hours. This, if achieved, will be a new high record for the industry, and will exceed the 1936 output by 8.5 p.c.



* Revised by G. S. Wrong, B.Sc., Chief, Transportation and Public Utilities Branch, Dominion Bureau of Statistics. For a list of publications of this Branch, see Chapter XXIX.

Exports to the United States reached a low point in 1932 with 467,215,000 kilowatt hours, but they began a steady increase about the middle of 1933 and continued to increase each year, the total for 1937 being 1,847,100,000 kilowatt hours, or four times the low record of 1932. The use of electric energy in electric boilers in various industries and particularly in the pulp and paper mills has increased rapidly and fairly steadily. In 1937 it reached a high record of 7,313,014,000 kilowatt hours, or 26 p.c. of the total output, and more than double the quantity so used in 1932. This power is partly off-peak power available at various times each day and partly surplus power available continuously until a better market develops. The domestic service consumption or the electricity used in residences has also increased steadily even during the years 1930-33 and in 1937 amounted to 1,887,116,000 kilowatt hours, an increase of 27 p.c. over the 1930 consumption and 7 p.c. over the 1936 consumption.

Interesting factors affect the relative per capita consumptions of electricity from central electric stations in Canada and the United States. An abundant supply of low-priced coal in the industrial area of the United States, and no coal but an excellent supply of water power in the central provinces of Canada, tend to favour the generation of power in central stations in Canada. Again, the pulp and paper industry is proportionately a smaller industry in the United States than in Canada. While the average consumption for domestic use is 64 p.c. higher in Canada than in the United States, the total consumption for domestic or residential use is about 7.4 p.c. of the total output of central electric stations for Canada and 16.6 p.c. for the United States.

4.—Summary Statistics of Central Electric Stations, calendar years 1917-36.

Year.	Number of Stations. ¹	Capital Invested.	Revenue from Sale of Power. ²	Total Horse-Power. ³	Kilowatt Hours Generated.	Cus-tomers.	Persons Em-ployed.	Salaries and Wages.
		\$	\$	h.p.	'000	No.	No.	\$
1917.....	666	356,004,168	4	1,844,571	4	4	8,847	7,777,715
1918.....	795	401,942,402	43,908,085	1,841,114	4	4	9,696	10,354,242
1919.....	805	416,512,010	47,933,490	1,907,135	5,497,204	4	9,656	11,487,132
1920.....	506	448,273,642	53,436,082	1,897,024	5,894,867	894,158	10,693	14,626,709
1921.....	510	484,669,451	58,271,622	1,977,857	5,614,132	973,212	10,714	15,234,678
1922.....	522	568,068,752	62,173,179	2,258,398	6,740,750	1,053,545	10,684	14,495,250
1923.....	532	581,780,611	67,496,893	2,423,845	8,099,192	1,112,547	11,094	14,784,038
1924.....	532	628,565,093	74,616,883	2,849,450	9,315,277	1,200,950	12,956	17,946,584
1925.....	563	726,721,087	79,341,584	3,569,527	10,110,459	1,279,731	13,263	18,755,907
1926.....	595	756,220,066	88,933,733	3,769,323	12,093,445	1,337,562	13,406	19,943,000
1927.....	629	866,825,285	104,033,297	4,173,349	14,549,099	1,381,966	14,708	22,946,315
1928.....	601	956,919,603	112,326,819	4,627,667	16,336,518	1,464,005	15,855	24,253,820
1929.....	587	1,055,731,532	122,883,446	4,925,555	17,962,515	1,555,883	16,164	24,831,821
1930.....	587	1,138,200,016	126,038,145	5,401,108	18,093,802	1,607,766	17,857	27,287,443
1931.....	559	1,229,988,951	122,310,730	5,706,757	16,330,867	1,632,792	17,014	26,306,965
1932.....	572	1,335,886,987	121,212,679	6,343,654	16,052,057	1,657,454	15,395	23,261,166
1933.....	575	1,386,532,055	117,532,081	6,616,006	17,338,990	1,666,882	14,717	21,431,877
1934.....	573	1,430,852,166	124,463,613	6,854,161	21,197,124	1,660,079	14,974	21,829,491
1935.....	566	1,459,821,168	127,177,954	7,104,142	23,283,033	1,694,703	15,342	22,519,993
1936.....	561	1,483,116,649	135,865,173	7,119,272	25,402,282	1,740,793	16,087	23,367,091

¹ Excluding non-generating stations in 1920 and subsequent years.

² Revised to exclude duplications.

³ Not including auxiliary plant equipment which is included in installation shown in central electric stations in Table 9 of the Manufactures chapter, pp. 424-429.

⁴ Data not available.

Equipment of Central Electric Stations.—The main-plant primary power equipment of all central electric stations aggregated 7,119,272 h.p. in 1936. This included water wheels and turbines, steam reciprocating engines and turbines, and internal combustion engines. The hydraulic power machines greatly predominated over the other prime movers, providing 95.7 p.c. of the total capacity, with steam turbines, steam reciprocating engines and internal combustion engines making up the remaining 4.3 p.c. Not included in the above were steam engines and internal combustion engines with a capacity of 200,621 h.p., or 2.8 p.c. of the total power capacity, installed as auxiliary or standby equipment.

Central electric stations that have no water-power, but are operated by steam and internal combustion engines, are on the whole small stations. Of the 52 main-plant steam reciprocating engines in central electric stations in 1936, only 9 in number were over 500 h.p. The steam turbines averaged approximately 4,400 h.p. with 18 units averaging 9,500 h.p., but there were only 60 steam turbines in the industry and these were confined to 22 stations, whereas the 809 water wheels and turbines averaged 8,400 h.p., including 4 at 65,000 h.p. and 5 at 66,000 h.p. each.

The majority of the fuel-using stations are primarily for lighting purposes, using the cheapest fuel procurable, generally local coal. In the Prairie Provinces bituminous and lignite coals are used for the steam engines and gasolene, oil distillates and producer gas for the internal combustion engines.

Of the 340 main-plant internal combustion engines in central electric stations in 1936, 189, or 56 p.c., were in Saskatchewan, 62 or 18 p.c. in Alberta, and 30 or 9 p.c. in Manitoba.

During 1936, the thermal engines produced 496,577,000 kilowatt hours at a cost for fuel of \$2,303,786, an average of 0.46 cents per kilowatt hour. This production was, however, less than 2 p.c. of the total output.

5.—Main-Plant Equipment of Central Electric Stations, by Provinces, and Total Auxiliary Equipment, 1936.

NOTE.—K.V.A. means Kilo-volt-amperes.

Type of Equipment and Province.	No. of Power Plants.	Water Wheels and Turbines.			Steam Engines, Steam Turbines and Internal Combustion Engines.			Dynamos.		
		No.	Capacity.	Average Capacity.	No.	Capacity.	Average Capacity.	No.	Capacity.	Average Capacity.
			h.p.	h.p.		h.p.	h.p.		K.V.A.	K.V.A.
MAIN-PLANT EQUIPMENT.										
P. E. Island.....	9	7	336	48	7	5,730	819	13	4,669	359
Nova Scotia.....	45	54	84,994	1,574	26	55,963	2,154	80	122,038	1,525
New Brunswick..	14	17	105,985	6,234	15	33,387	2,226	32	118,490	3,703
Quebec.....	96	260	3,352,776	12,895	8	2,640	330	268	2,993,210	11,169
Ontario.....	133	339	2,201,136	6,493	16	1,365	853	351	1,769,280	5,041
Manitoba.....	27	39	437,800	11,226	39	3,556	912	78	354,552	4,546
Saskatchewan.....	115	Nil	—	—	216	143,112	663	212	121,362	572
Alberta.....	62	18	69,920	3,884	96	59,799	623	107	105,039	982
British Columbia and Yukon.....	60	75	557,713	7,436	29	3,060	106	106	437,365	4,126
Totals.....	561	809	6,810,660	8,419	452	308,612	683	1,247	6,025,999	4,832
AUXILIARY-PLANT EQUIPMENT.										
	—	Nil	—	—	132	200,621	1,520	127	172,327	1,357
Grand Totals...	561	809	6,810,660	8,419	584	509,233	872	1,374	6,198,326	4,512

Provincial Distribution of Electric Energy.—The distribution by provinces of the electric energy generated in central electric stations throughout Canada is shown in Table 6 for the calendar years 1931-36. In the latest year over 82 p.c. of the total generated electric energy was produced in the leading industrial provinces

of Ontario and Quebec. From Table 7 it is seen that the total electric energy exported in the calendar year 1937 was 1,847,100,000 kilowatt hours, or 6.7 p.c. of the estimated production by central electric stations in that year; in 1936 it had amounted to 1,578,100,000 kilowatt hours, or 6.2 p.c. of the total amount generated in central electric stations.

6.—Electric Energy Generated in Central Electric Stations, by Provinces, calendar years 1931-36.

Province.	Kilowatt Hours.					
	1931.	1932.	1933.	1934.	1935.	1936.
	'000	'000	'000	'000	'000	'000
Prince Edward Island.....	4,413	4,662	4,765	4,902	5,127	5,769
Nova Scotia.....	257,573	279,854	330,436	389,049	389,144	412,294
New Brunswick.....	404,350	427,604	378,687	394,100	390,003	425,849
Quebec.....	8,066,026	8,491,128	9,611,084	11,335,987	12,628,662	13,019,908
Ontario.....	4,948,819	4,258,042	4,381,094	6,113,595	6,653,219	7,927,044
Manitoba.....	1,084,763	1,087,010	1,077,210	1,183,381	1,342,093	1,574,898
Saskatchewan.....	134,014	135,898	131,164	134,033	138,479	145,219
Alberta.....	205,082	195,467	182,963	193,002	208,054	216,770
British Columbia.....	1,225,827	1,172,392	1,241,587	1,449,075	1,528,252	1,674,531
Yukon.....						
Totals.....	16,330,867	16,052,057	17,338,990	21,197,124	23,283,033	25,402,282

Electric Light and Power.—Electric light and power companies are subject to registration and inspection under the Electricity Inspection Act, 1907 (6-7 Edw. VII, c. 14), and the export of electric energy is regulated by the Electricity and Fluid Exportation Act, 1907 (6-7 Edw. VII, c. 16). Both Acts were administered by the Department of Inland Revenue until Sept. 1, 1918, when, by Order in Council of June 3, 1918, their administration was transferred to the Department of Trade and Commerce. (See cc. 54 and 55, R.S.C., 1927.)

In previous Year Books, Table 7 showed the quantities produced for export, including the line losses between the power houses and the International Boundary, and the data were on a fiscal year basis. The data below in Table 7 are the quantities actually exported and are for calendar years.

7.—Electric Energy Exported under Authority of the Electricity and Fluid Exportation Act, calendar years 1934-37.

Company.	1934.	1935.	1936.	1937.
	K.W.H.	K.W.H.	K.W.H.	K.W.H.
Hydro-Electric Power Commission of Ontario.....	367,953,300	372,001,692	372,415,114	386,310,900
Hydro-Electric Power Commission of Ontario (surplus).....	193,449,610	178,944,660	299,406,823	439,491,214
Canadian Niagara Power Company.....	313,193,556	328,112,617	350,025,172	379,904,201
Canadian Niagara Power Company (surplus).....	23,324,300	25,498,800	34,706,000	12,109,200
Ontario and Minnesota Power Co.....	13,581,600	15,229,400	23,535,200	35,215,850
Maine and New Brunswick Electric Power Co.....	12,370,806	13,239,529	14,072,901	16,700,587
British Columbia Electric Railway Co.....	153,654	177,095	183,727	188,113
Western Power Company of Canada.....	2,400	34,200	Nil	Nil
Southern Canada Power Co.....	372,576	386,846	390,286	444,398
Cedar Rapids Manufacturing and Power Co.....	317,347,143	423,628,980	476,789,253	570,733,439
Maritime Electric Company, St. Stephen, N.B.....	817,620	1,180,280	1,708,860	894,963 ¹
Fraser Companies, Ltd.....	5,719,000	5,566,000	4,129,000	3,873,000
Northport Power and Light Co.....	230,140	291,072	289,246	305,958
Northern B.C. Power Co.....	42,190	40,970	53,660	39,270
Detroit and Windsor Subway Co.....	239,900	254,400	257,800	277,800
Manitoba Power Commission.....	Nil	Nil	146,700	610,894
Totals.....	1,248,797,795	1,364,586,541	1,578,109,242	1,847,099,787

¹ Exported by Canadian Cottons, Ltd., from April, 1937.

Section 3.—Public Ownership of Hydro-Electric Power.

When, in the early years of the twentieth century, it became evident that the development of hydro-electric power would become a "key industry" in Canada, more especially in its coal-less central provinces of Ontario and Quebec, a strong movement arose in favour of conserving the water powers of the country for the public benefit instead of allowing them to pass into the hands of private corporations. This "public ownership" movement developed especial strength in Ontario and finally led to the establishment of the Hydro-Electric Power Commission, the operating statistics of which are given in Subsection 1. More recently, Manitoba, Nova Scotia, New Brunswick, and Saskatchewan have established Hydro-Electric Commissions on the model of the Ontario system. In Quebec and British Columbia, on the other hand, the development of hydro-electric power has been left in the hands of private corporations.

Subsection 1.—The Hydro-Electric Power Commission of Ontario.*

The publicly-owned hydro-electrical undertaking of Ontario—known in the province as the "Hydro"—is an organization of a large number of partner-municipalities, co-ordinated into groups or systems for securing common action with respect to power supplies. It had its beginning in 1903, when, as a result of public agitation to ensure the provision of adequate supplies of electric power for distribution throughout the province at low cost, seven municipalities united under statutory authority in appointing an investigating commission to deal with power problems. This commission, known as the Ontario Power Commission, completed its work in 1906, and in the same year the Ontario Government, by special Act, created the present Hydro-Electric Power Commission of Ontario. The operations of the undertaking have grown rapidly and in 1936 electrical service was supplied by the Commission to about 782 municipalities, comprising nearly all of the cities and towns of the province, as well as many small communities and rural areas.

The providing of the power, either by generation or purchase, its transformation, transmission, and delivery to the individual municipalities and to large industrial consumers, and the operation of rural power districts are carried on by the municipalities acting *collectively* through their agent and trustee, the Hydro-Electric Power Commission of Ontario. The local operations involved in the retail distribution of the electric energy to the consumers within the limits of the various urban municipalities are performed by the municipalities *individually* through municipal utility commissions acting under the general supervision of the Hydro-Electric Power Commission.

Capital required for plant to generate and transmit power is lent by the province, and the municipalities are under contract to repay, over a period of 40 years, the moneys thus lent, with interest in full. The local distribution systems are financed individually by the issue of municipal debentures. Provision is made, in the rates charged to the ultimate consumers, for revenue with which to retire these bonds in from 20 to 30 years. The rates at which power is supplied by the Commission to the various municipalities vary with the amounts of power used, the distances from the sources of supply, and other factors. The basic principle underlying the operations of the undertaking is the provision of service 'at cost'. The rates charged by the municipal utilities for retail service are under the control of

* Revised by R. T. Jeffery, Chief Municipal Engineer, Hydro-Electric Power Commission of Ontario. Toronto, Ontario.

the Commission and are designed to ensure that each class of consumer bears its appropriate share of the expenses of the undertaking. Each type of consumer is charged with the cost of the service received as far as is practicable.

Power Supplies.—To meet the constantly expanding power demands of the undertaking, the Commission has constructed its own generating plants, and has acquired several privately-owned generating plants. Of the 41 hydro-electric power plants operated by the Commission in 1936, the largest is the Queenston-Chippawa development on the Niagara river which was constructed by the Commission and has a normal operating capacity of 500,000 h.p. Provision for the needs of the near future has been made—including existing plants, plants under construction and power under contract for present and future delivery—up to an aggregate of about 1,600,000 h.p.

Hydro-Electric Power Commission Statistics.—The Canada Year Book of 1910 (p. xliii) described the turning on, at Berlin (now Kitchener), Ontario, on Oct. 11, 1910, of electric energy generated by Niagara falls. The small initial load of less than 1,000 h.p. increased rapidly and by 1915 had reached 100,000 h.p. In 1920 the total power distributed exceeded 350,000 h.p. and in 1930 it was over 1,260,000 h.p. Table 8 shows the growth of the co-operative municipal electrical undertaking of Ontario. It will be noted that the total capital of the undertaking, which includes investments of the Hydro-Electric Power Commission in power-producing and transmitting equipment, etc., and investments of the municipalities in distributing systems and other assets, aggregated nearly \$414,000,000 in 1936.

8.—Summary Statistics Representative of the Growth of the Ontario Hydro-Electric Power Commission's Undertaking, fiscal years ended Oct. 31, 1910-36.

Year.	Municipalities Served.	Customers Served.	Total Power Distributed by Commission.	Capital of Commission and Assets of Municipal Utilities.
	No.	No.	h.p.	\$
1910.....	10	1	2,500	2,521,000
1911.....	26	1	15,200	4,020,000
1912.....	36	1	31,000	4,576,000
1913.....	58	58,961	45,000	17,698,000
1914.....	95	96,744	77,000	25,023,000
1915.....	131	116,892	104,000	29,791,000
1916.....	191	155,052	167,000	34,917,000
1917.....	215	181,711	333,000	74,701,000
1918.....	236	194,382	316,000	87,812,000
1919.....	252	230,472	328,000	103,591,000
1920.....	266	261,582	355,000	128,334,000
1921.....	301	285,923	529,000	193,918,000
1922.....	348	364,988	605,000	220,594,000
1923.....	393	387,983	685,486	236,023,000
1924.....	418	415,922	691,198	254,189,000
1925.....	444	439,702	816,295	265,998,000
1926.....	501	448,241	928,032	274,972,000
1927.....	530	469,572	949,700	286,165,000
1928.....	560	522,770	1,032,500	297,204,000
1929.....	607	552,321	1,136,689	314,237,000
1930.....	668	586,267	1,263,512	359,648,000
1931.....	721	600,297	1,107,227 ²	373,010,000
1932.....	747	611,955	1,108,037 ²	382,558,000
1933.....	757	621,418	1,366,735	394,661,000
1934.....	760	624,801	1,451,699	398,225,000
1935.....	766	636,134	1,625,733	408,001,000
1936.....	782	649,517	1,509,667	413,710,000

¹ Information not available.

² Revised since the publication of the 1937 Year Book.

Table 9 shows the growth in load in the various systems during the past five years.

9.—Distribution of Power to Systems of the Ontario Hydro-Electric Power Commission, fiscal years ended Oct. 31, 1932-36.

(20-minute peak horse-power—system coincident peaks.)

System and District.	1932.	1933.	1934.	1935.	1936.
	h.p.	h.p.	h.p.	h.p.	h.p.
Niagara system.....	867,446	1,055,697	1,071,046	1,177,346	1,006,166
Dominion Power and Transmission....	43,968	45,710	50,670	54,155	54,021
Georgian Bay system.....	25,666	23,887	24,488	27,534	26,555
Eastern Ontario system.....	80,544	86,890	121,823	133,733	117,969
Thunder Bay system.....	65,700	90,450	99,866	113,673	133,914
Manitoulin district.....	1	80	88	114	138
Northern Ontario Properties—					
Nipissing district.....	3,751	3,539	3,840	3,921	4,115
Sudbury district.....	7,574	12,466	12,466	13,070	14,021
Abitibi district.....	11,340	45,389	64,075	96,814	146,783
Patricia district.....	2,048	2,627	2,828	3,512	4,182
Espanola district.....	1	1	509	547	101
St. Joseph district.....	1	1	1	1,314	1,702
Totals.....	1,108,037	1,366,735	1,451,699	1,625,733	1,509,667

¹ Not then in operation.

The initial capital expenditure to serve some twelve municipalities amounted to about \$3,600,000. Table 10 shows for the latest five years the capital investment in the respective systems of the undertaking and in the associated municipal undertakings.

10.—Capital Investments in Ontario's Hydro Undertakings, fiscal years ended Oct. 31, 1932-36.

Item.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$
Investments by Commission on behalf of Co-operating Municipalities, in Generating Plants, Transmission Systems, etc.—					
Niagara system.....	202,098,895	201,975,671	202,429,411	210,332,868	210,746,186
Dominion Power and Transmission	1	1	1	1	1
Chats Falls development.....	5,878,494	6,167,756	6,197,129	1	1
Georgian Bay system.....	8,329,026	8,394,645	8,427,279	8,478,202	8,615,788
Eastern Ontario system.....	21,060,824	19,372,834	19,351,622	20,096,488	19,504,227
Thunder Bay system.....	18,480,739	18,630,772	18,679,611	18,669,882	18,820,351
Manitoulin district.....	2	32,626	35,473	35,316	35,722
Northern Ontario properties ¹	10,786,686	23,790,137	25,143,854	30,767,010	31,870,335
Hydro-electric railways.....	1,985,113	2,076,925	2,173,664	2,263,182	2,352,559
Office and service buildings, construction plant, inventories, etc.....	4,629,053	4,562,603	4,449,914	5,117,511	4,985,730
Miscellaneous, engineering, storage, etc.....	4	4	4	4	933,237
Totals, Investments by Commission	273,248,830	285,003,969	287,387,957	295,760,459	297,864,135
Investments by municipalities in distributing systems and other assets (exclusive of sinking fund equity in H.E.P.C. systems, included above), all systems.	109,309,934	109,657,574	110,836,805	112,240,516	115,845,676
Grand Totals.....	382,558,764	394,661,543	398,224,762	408,000,975	413,709,811

¹ Included in the Niagara system.

² Not in operation.

³ The Northern Ontario properties include the Nipissing district, the Sudbury district, the Patricia district, the Abitibi district, the St. Joseph district, and the Espanola district. These properties are owned by the Government of Ontario and operated on behalf of the province by the H.E.P.C.

⁴ Not segregated prior to 1936.

The total reserves of the Commission and of the municipal electrical utilities for sinking fund, renewals, contingencies, and insurance purposes are shown in Table 11.

11.—Accumulated Reserves of the Ontario Hydro-Electric Power Commission and of the Local Electrical Utilities of the Co-operating Municipalities, fiscal years ended Oct. 31, 1932-36.

Item.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$
Niagara system.....	50,900,344	52,380,601	55,092,548	57,685,921	65,716,064
Georgian Bay system.....	2,482,837	2,822,302	3,153,899	3,449,255	3,813,421
Eastern Ontario system.....	5,228,591	5,338,116	5,984,350	6,663,122	7,403,232
Thunder Bay system.....	2,739,224	3,104,669	3,521,436	3,960,712	4,521,100
Northern Ontario properties.....	164,784	625,282	868,609	1,475,621	2,130,914
Nipissing rural power districts and Manitoulin rural power district.....	¹	7,560	12,714	15,930	19,376
Bonnechère storage.....	1,734	3,537	5,417	7,373	9,406
Service buildings and equipment.....	664,714	706,849	750,936	797,256	861,804
Hydro-electric railways.....	109,240	121,482	134,722	144,873	165,392
Insurance—workmen's compensation and staff pension insurance.....	3,854,019	4,322,862	4,690,163	5,167,636	5,645,064
Totals, reserves of the Commission.....	66,145,487	69,433,260	74,214,794	79,367,699	90,285,773
Totals, reserves—including surplus—of municipal electric utilities.....	56,624,617	59,736,820	64,177,407	69,106,510	75,187,970
Totals, Commission and Municipal Reserves.....	122,770,104	129,170,080	138,392,201	148,474,209	165,473,743

¹ Included in Northern Ontario properties.

Statistics of Urban Municipal Electrical Utilities of Ontario Supplied by the Commission.—The Commission exercises supervisory functions over the electrical utilities owned and operated by the partner-municipalities, and has introduced a uniform accounting system which enables the Commission to present in its Annual Reports consolidated balance sheets and operating reports regarding these utilities. These statistics relate to about 90 p.c. of the retail customers supplied by the undertaking. Summary statistics regarding service to rural consumers are given in Table 14.

Statistics of the assets and liabilities of the electrical departments of urban municipalities served by the Hydro-Electric Power Commission are given in Table 12. These show, for 1936, total assets of \$152,039,551 as compared with liabilities of \$40,657,706. Of the difference, \$58,623,145 is allotted as reserves, leaving a surplus of \$52,758,700. The item "equities in H.E.P.C. systems", listed under both assets and reserves, relates to the sinking fund equities acquired by the individual municipalities in their collective generation and transmission undertaking administered by the Hydro-Electric Power Commission. All other items relate to the local distributing systems operated individually by the urban municipalities which are partners in the Hydro undertaking. In computing the percentage of net debt

to total assets the equity in Hydro systems is not taken into account. It will be noted that between 1932 and 1936 total assets have increased by \$19,663,487, while total liabilities have decreased by \$12,027,611.

12.—Consolidated Statement of Assets, Liabilities, Reserves, and Surpluses of Electrical Departments of Urban Municipalities Served by the Ontario Hydro-Electric Power Commission, calendar years 1932-36.

Item.	1932.	1933.	1934.	1935.	1936.
Numbers of municipalities included.....	280	282	282	284	284
Assets—	\$	\$	\$	\$	\$
PLANT.					
Lands and buildings.....	9,503,744	10,186,471	10,262,693	10,381,191	10,528,595
Substation equipment.....	22,288,782	22,306,801	22,327,619	22,072,115	22,162,208
Distribution systems—overhead.....	20,866,767	21,152,681	21,353,726	21,650,568	22,163,701
Distribution systems—underground.....	5,820,057	5,945,226	6,031,768	6,068,725	6,070,337
Line transformers.....	9,392,662	9,478,605	9,635,279	9,678,578	9,845,940
Meters.....	8,403,252	8,514,165	8,624,505	8,767,892	9,043,616
Street lighting equipment—regular.....	2,257,618	2,381,599	2,395,296	2,420,239	2,527,188
Street lighting equipment—ornamental.....	1,545,355	1,458,444	1,464,307	1,486,303	1,504,597
Miscellaneous construction expenses.....	4,120,926	4,040,860	3,907,360	3,616,987	4,019,431
Steam or hydraulic plants.....	498,232	502,979	494,933	496,050	496,186
Old plant.....	4,989,655	5,016,756	4,978,079	4,917,917	4,876,405
Plants not distributed.....	200,000	200,000	200,000	200,000	200,000
Totals, Plant.....	89,887,050	91,184,587	91,675,565	91,756,565	93,438,204
OTHER.					
Bank and cash balances.....	3,185,442	1,696,489	2,215,914	2,927,486	3,921,121
Securities and investments.....	2,059,325	2,163,785	2,382,447	2,593,634	2,924,913
Accounts receivable.....	3,683,059	3,746,911	4,001,596	4,363,298	4,560,714
Inventories.....	1,232,209	1,226,043	1,110,705	1,212,063	1,261,844
Sinking funds on local debentures.....	9,099,211	9,386,177	9,161,420	9,086,152	9,535,713
Equities in H.E.P.C. systems.....	23,066,130	26,045,679	29,274,341	32,609,980	36,193,874
Other assets.....	163,638	253,582	289,158	301,318	203,168
Totals, Assets.....	132,376,064	135,703,253	140,111,146	144,850,496	152,039,551
Liabilities—					
Debenture balances.....	45,133,306	42,606,145	39,646,990	36,667,081	34,485,507
Accounts payable.....	3,512,725	3,320,486	3,149,035	2,931,934	2,879,497
Bank overdrafts.....	298,910	206,398	143,557	72,085	25,560
Other liabilities.....	3,740,376	3,787,725	3,669,008	3,462,906	3,267,142
Totals, Liabilities.....	52,685,317	49,920,754	46,608,590	43,134,006	40,657,706
Reserves—					
For equity in H.E.P.C. systems.....	23,066,130	26,045,679	29,274,341	32,609,980	36,193,874
For depreciation.....	14,902,177	16,075,959	17,426,809	18,410,882	19,666,170
Other reserves.....	1,902,308	2,048,082	2,056,821	2,459,075	2,763,101
Totals, Reserves.....	39,870,615	44,169,720	48,757,971	53,479,947	58,623,145
Surpluses—					
Debentures paid.....	15,244,778	17,651,368	20,608,130	23,481,974	26,084,295
Local sinking funds.....	9,099,211	9,386,177	9,161,420	9,086,153	9,535,713
Operating surpluses.....	15,476,143	14,575,234	14,975,035	15,668,416	17,138,692
Totals, Surpluses.....	39,820,132	41,612,779	44,744,585	48,236,543	52,758,700
Totals, Liabilities, Reserves, and Surpluses.....	132,376,064	135,703,253	140,111,146	144,850,496	152,039,551
Percentages of net debt to total assets....	43.4	40.4	35.9	32.0	28.3

13.—Statement of Earnings and Expenses of Electrical Departments of Urban Municipalities Served by the Ontario Hydro-Electric Power Commission, calendar years 1932-36.

Item.	1932.	1933.	1934.	1935.	1936.
Numbers of municipalities included.....	280	282	282	284	284
Earnings—	\$	\$	\$	\$	\$
Domestic service.....	11,447,308	11,429,101	11,844,033	12,145,220	12,682,140
Commercial light service.....	6,243,794	6,013,026	6,206,086	6,458,748	6,815,439
Commercial power service.....	9,356,694	9,080,522	9,692,784	10,211,969	10,694,192
Municipal power.....	1,859,585	1,826,872	1,875,970	1,821,286	1,817,987
Street lighting.....	1,783,973	1,779,583	1,777,597	1,788,760	1,799,421
Rural service—merchandise ¹	11,069	12,813	18,748	21,670	23,159
Miscellaneous.....	513,787	485,925	555,172	562,286	575,826
Totals, Earnings.....	31,216,210	30,627,842	31,970,390	33,009,939	34,408,164
Expenses—					
Power purchased.....	19,109,036	19,330,862	19,591,888	20,053,677	20,486,583
Substation operation.....	503,352	484,765	468,944	478,814	478,856
Substation maintenance.....	300,186	288,583	296,551	297,127	301,897
Distribution systems, operation and maintenance.....	969,750	895,351	844,814	840,634	855,576
Line transformer maintenance.....	95,485	82,321	75,172	70,750	72,712
Meter maintenance.....	300,105	283,116	291,403	313,234	328,411
Consumers' premises expense.....	368,209	361,499	352,499	340,762	306,645
Street lighting, operation, and maintenance.....	360,710	353,082	338,785	340,120	356,932
Promotion of business.....	266,761	259,937	228,741	252,648	288,339
Billing and collecting.....	818,721	817,660	827,860	835,376	945,893
General office, salaries, and expenses.....	960,559	908,518	908,040	943,880	967,269
Undistributed expense.....	436,693	349,101	362,322	360,677	448,333
Truck operation and maintenance.....	112,060	105,453	98,082	95,151	69,805
Interest.....	2,532,941	2,426,286	2,204,994	2,040,130	1,893,304
Sinking fund and principal payments on debentures.....	2,244,368	2,319,319	2,358,169	2,423,088	2,448,223
Totals, Expenses.....	29,378,936	29,265,853	29,248,264	29,686,068	30,248,778
Surpluses.....	1,837,274	1,361,989	2,722,126	3,323,871	4,159,386
Depreciation charges.....	1,920,896	1,989,000	2,036,637	2,076,322	2,230,022
Surpluses less depreciation charges.....	-83,622	-627,011	685,489	1,247,549	1,929,364

¹ Profits from the sale of merchandise.

Rural Electrical Service in Ontario.—During the past few years substantial progress has been made in Ontario in the field of rural electrification, and the Commission's rural operations are now an important feature of its work. Towards this rural work the Ontario Government, pursuant to its policy of promoting the basic industry of agriculture, contributes, in the form of 'grants-in-aid', 50 p.c. of the initial capital cost of distribution lines and equipment. In 1930 the Ontario Legislature passed two additional Acts relating to rural service. The Rural Power District Loans Act, 1930, provides for advances up to \$1,000 to actual farm owners of lands and premises in rural power districts, for the installation of electrical wiring and the purchase of equipment. The Rural Power District Service Charge Act, 1930, provides for the fixing of low maximum service charges for all classes of rural service. In Table 14 will be found statistics relating to rural electrical distribution systems operated by the Hydro-Electric Power Commission. A steady rate of increase is apparent from these statistics.

11.—Statistics Relating to Electrical Service to Rural Power Districts Operated by the Ontario Hydro-Electric Power Commission, years ended Oct. 31, 1932-36.

NOTE.—Re rural power district legislation, consult the following Ontario Government publications: *The Power Commission Act* (R.S.O., 1927, c. 57); *The Rural Hydro-Electric Distribution Act* (R.S.O., 1927, c. 59); *The Rural Power District Loans Act, 1930* (20 Geo. V, c. 14); and *The Rural District Service Charge Act, 1930* (20 Geo. V, c. 15).

Item.	1932.	1933.	1934.	1935.	1936.
Rural power districts..... No.	172	171	171	171	174
Townships served..... No.	358	365	367	368	380
Consumers..... No.	59,534	61,845	63,840	67,802	73,614
Primary distribution lines..... miles	8,918	9,174	9,461	9,976	10,808
Power supplied..... h.p.	32,853	32,372	33,949	37,190	42,897
Revenues from customers..... \$	2,752,353	2,796,023	2,832,672	2,902,809	3,000,750
Total expenses..... \$	2,776,192	2,904,612	2,908,967	2,875,498	2,891,007
Net surpluses..... \$	—23,838	—108,589	—76,295	27,311	109,743
Capital invested, totals..... \$	16,964,227	17,693,875	18,307,511	19,182,265	20,674,674
Provincial grants-in-aid, totals..... \$	8,393,308	8,752,993	9,054,080	9,489,671	10,232,099

¹ Included in previous item, "Capital invested".

Subsection 2.—Hydro-Electric and Power Commissions in Other Provinces.

Quebec.—*Quebec Streams Commission.*—Created by 1 Geo. V, c. 5, and given additional powers by 3 Geo. V, c. 6 (see R.S.Q., 1925, c. 46), and by 20 Geo. V, c. 34, the Commission is authorized to ascertain the water resources of the province, to make recommendations regarding their control, and to construct certain storage dams and operate them so as to regulate the flow of streams. The Commission has not undertaken the direct production of electric power, but has assisted companies engaged in such work by a systematic collection of data on the flow of the principal rivers and on the meteorological conditions, by investigation of numerous water-power sites and determination of the longitudinal profile of a large number of rivers, but mostly by the regulation of the flow of the principal power streams, thereby increasing very materially the amount of power available. This regulation is obtained by constructing storage dams holding water in large reservoirs during flood periods and using it to increase the flow at low-water periods.

The Commission has built storage reservoirs on the St. Maurice river, where the low-water flow has been increased from 6,000 second-feet to 18,000 second-feet, on lake Kenogami, the St. Francis, the Métis, the Ste. Anne de Beaupré, and the North rivers. The entire cost to the Commission of these storage works has been about \$9,000,000 and the annual revenue exceeds \$634,000.

Other reservoirs on the Gatineau, Lièvre, and Mattawin rivers which are the property of the Commission and are operated by that body have been built and paid for by the benefiting companies instead of being financed by the Commission.

Provincial Electricity Board.—Created by an Act passed at the 1937 session of the Legislature (1 Geo. VI, c. 25), the Provincial Electricity Board superseded, with wider powers, the former Quebec Electricity Commission which operated from Dec. 2, 1935, to Aug. 31, 1937. The new Board is given power to control undertakings for the production, sale, and distribution of electricity in the province, to fully investigate the property and accounts of such undertakings, to alter and cancel abusive contracts, and to fix rates for the sale of electricity based upon the value of physical assets and reasonable expenses of an undertaking. All electrical undertakings in the province are to operate under licence from the Board, such licences to

remain in force for two years. The duration of all contracts for the distribution of electricity is limited to five years. The Act does not apply to municipal corporations which have established an electricity service, except that such corporations may benefit by the provisions for obtaining revision of an abusive contract.

National Electricity Syndicate.—Created by an Act of the 1937 Legislature (1 Geo. VI, c. 24), the Syndicate is intended to develop electricity-generating plants and distributing systems in the province. The Syndicate may establish its undertakings by one or both of two methods: first, by funds advanced by the Provincial Government; secondly, by the issue of stock or debentures of which the Provincial Government is to purchase at least 60 p.c. to give it a controlling interest. The Act authorizes the Syndicate to use the first method to develop generating plants and distributing systems in the electoral districts of Abitibi, Timiskaming, Lake St. John and Roberval, and for this purpose authorizes an advance to the Syndicate of \$10,000,000 which may be subsequently increased by the Legislature. No further alienation or extension of leases previously granted on water-power sites of over 300 h.p. capacity may be granted without consent of the Legislature. The Act also permits the Government to contribute up to 55 p.c. of the cost of an electricity distributing system established by any rural municipality.

Nova Scotia.—The Nova Scotia Power Commission was created in 1919 with powers similar to those of the Ontario Commission. It is authorized to “generate, accumulate, transmit, distribute; supply, and utilize electric energy and power in any part of the province of Nova Scotia, and do everything incidental thereto or deemed by the Commission necessary or expedient therefor”. Its main operations, however, are undertaken with the approval of the Lieutenant-Governor in Council.

The Commission has already constructed several important hydro-electric developments and is now operating the following systems: *St. Margaret*—sells power by wholesale and retail in Halifax and vicinity; *Mushamush*—sells power by wholesale and retail in Lunenburg Co.; *Sheet Harbour*—sells power by wholesale in Pictou Co., supplies demands of a groundwood pulp-mill at Sheet Harbour, retails in Sheet Harbour and in Musquodoboit and Stewiacke valleys and serves the town of Truro through the Pictou County Power Board; *Mersey System*—supplies demands of pulp and paper mill at Brooklyn, Queens Co.; *Markland System*—supplies town of Liverpool, Caledonia valley and places in vicinity, also power for a woodworking factory and a gold mine; *Tusket System*—sells power by wholesale in Yarmouth, also supplies demands of Cosmos Imperial Mills, Ltd., at Yarmouth; *Roseway System*—sells power wholesale in Shelburne and wholesale and retail in the town of Lockeport and vicinity; *Antigonish System*—supplies Antigonish town, and other communities in Antigonish Co.; *Canseau System*—serves various places on Cape Breton island, including St. Peters and Cheticamp districts which are supplied with diesel-generated energy. The Mabou district is supplied by the Commission with energy purchased in bulk from the Inverness collieries.

The Department of Rural Electrification of the Commission, created during the year 1937, is establishing various distribution districts throughout the province, and thus making service available to communities that were unable to enjoy electric light previous to the passing of the Rural Electrification Act, 1937.

The total installed capacity at Nov. 30, 1937, was 67,362 h.p., and there were about 308 miles of main transmission lines and 276 miles of secondary transmission and distribution lines. The total capital expenditure to Nov. 30, 1937, was \$14,487,803 and the reserves were \$2,253,715.

New Brunswick.—The New Brunswick Electric Power Commission, incorporated under provincial legislation, owns and operates two generating stations: an 11,000 h.p. hydro-electric plant at Musquash, twelve miles west of Saint John; and a 15,000 h.p. plant at Grand Lake in the Minto coal area. Transmission lines of 66,000 volts connect the two plants with each other and with the cities of Saint John and Moncton. A 33,000-volt line delivers power from the Grand Lake plant to Fredericton and Marysville. A 66,000-volt line delivers power from the Grand Lake plant to the towns of Newcastle and Chatham.

Power is sold *en bloc* to the cities of Saint John, Moncton, and Fredericton and to the town of Sussex, supplying 17,150 customers in these communities. Power is also distributed directly by the Commission to villages and rural districts, serving directly 10,600 customers. The high-voltage line mileage is 307 and 1,100 miles of distributing lines are in operation. The Commission has under construction rural distribution lines totalling 85 miles in length which will add 250 customers.

The Commission has a plant investment of \$8,022,000 and an annual revenue of \$1,044,000.

Manitoba.—The Manitoba Power Commission commenced its operations in 1919 under the authority of the Electrical Power Transmission Act. This Act empowered the Commission to make provision for generating electric energy, to enter into contracts for the purchase of power in bulk from generating agencies, and for its transmission and sale to municipalities, corporations, and individuals. Legislation was passed in 1929 by which the Government undertook to pay interest charges and sinking fund charges on an amount not exceeding 50 p.c. of the capital cost of the construction and erection of equipment required for the generation and transmission of electric energy. In 1931 passage of the Electrical Power Transmission Act reorganized the administration of the Commission by establishing a Board and giving to it additional authority.

The first transmission line was completed in 1920 to serve the city of Portage la Prairie. Power was sold to the city in bulk. With Portage la Prairie as a nucleus, the lines were rapidly extended over the entire southern and western portions of the province, and at the present time the Commission is serving 96 cities, towns, and villages. During this period the Commission took over several municipally-owned plants, notably the plants at Birtle, Brandon, Virden, and Minnedosa. Each of these services has now been tied into the main system and the plants are relegated to standby service. The Commission purchases energy from the municipally-owned plant at Dauphin and distributes it to outlying districts. Power is also purchased from the Winnipeg Electric Company at Selkirk and distributed to the summer resort areas along lake Winnipeg. The Commission has made rapid strides in the promotion of electrical services for farms. The farm rates have been lowered and the cost of building farm extensions has been considerably reduced. In 1937 the Commission made its first incursion into the eastern part of the province, when the towns of Whitemouth and Elma were served.

In 1936 arrangements were completed for the export of a block of power to the Inter-State Power Company at Niche, North Dakota.

The Commission owns and operates a central steam-heating system at Brandon, supplying heat to the business part of the city and to part of the residential section. It also owns and operates the Brandon gas plant.

The object of the Commission is to extend service to any district in which the available revenue is sufficient to justify the necessary capital expenditure. In this

connection, the years 1936 and 1937 brought an unusual number of inquiries for service and it is apparent that succeeding years will see the hydro network growing very rapidly.

Saskatchewan.—The Saskatchewan Power Commission was established in 1929 under the Power Commission Act (R.S.S., 1930, c. 30), authorizing the Commission to manufacture, sell, and supply electric energy, to acquire and develop water-power sites, to acquire or construct steam and oil plants, to construct transmission lines, to purchase power, and to enter into contracts with municipalities for the supply of energy. The Commission is also given certain control and regulatory powers *re* the operation of electrical public utilities, and is charged with the responsibility for the administration of the Electrical Inspection and Licensing Act, 1935 (1934-35, c. 64).

The initial operations of the Commission were concerned with acquiring by purchase municipally-owned plants which were improved, enlarged, or supplemented by installations made by the Commission and were operated as individual systems of supply. Examples of such acquisitions made in 1929 were the Saskatoon, Humboldt, and Rosthern plants, while the plant at Shellbrook, the Wynyard-Elfrs-Wadena and the Leader-Prelate-Sceptre systems, served from plants at Wynyard and Leader, were established by the Commission in the same year. In 1930 the municipal plants at North Battleford, Swift Current, Unity, and Lanigan and the privately-owned plant of the Maple Creek Light, Power & Milling Co. at Maple Creek were acquired, and in 1931 the generating plant at Willowbunch was added. The Watrous-Nokomis system, including ten towns and villages, was also purchased from Canadian Utilities, Ltd., and has been connected with the Bulyea system of the Montreal Engineering Co., Ltd.

Transmission lines run from Saskatoon, as the centre of the main system, easterly to Humboldt, northerly to Shellbrook and Duck Lake, westerly to Radisson, and southwesterly to Rosetown. Additional lines link Rosetown with Moose Jaw, and Tisdale (where the Commission has a generating plant) with Nipawin. The systems built in 1929 have been extended. All transmission lines supply towns and villages along their courses. By a line built in 1935, service is given to the town of Battleford from the North Battleford plant. There are now 1,364 miles of transmission lines owned and operated.

The Commission purchases several blocks of power or contracts for the interchange of power from private interests in addition to supplying energy generated at its own plants. The number of consumers served directly in 123 towns and villages is approximately 8,506 and those indirectly served (where the cities operate the distribution systems) number 16,796. The total plant investment as at Dec. 31, 1936, was approximately \$7,711,120.

British Columbia.—British Columbia as a province has not, up to the present time, established any commissions for the development and use of water power for the distribution of electric energy. Such power developments as have been undertaken to date have been by private interests or by municipalities. The Water Board, a quasi-judicial body, regulates the rates which are charged by public utility companies.

CHAPTER XIV.—MANUFACTURES.*

Section 1.—The Evolution of Canadian Manufacturing Industries.

Early Manufactures.—The type of manufactures established in a community will, in the beginning, be largely determined, more especially where transportation charges are high, by the raw materials available in that community. For example, the first agricultural process to be carried on by Europeans in what is now the Dominion of Canada was probably the raising of a crop of grain at Port Royal, Nova Scotia, in 1605; the first corresponding manufacturing process was the grinding of the grain in the autumn of that year. Other early manufactures were necessarily connected with the satisfaction of the primary needs of human beings for food, clothing and shelter, and with the other primary need—protection. It is therefore significant that, at a census of occupations taken in 1681, a comparatively large number of tailors, shoemakers, masons, carpenters, gunsmiths, and edge-tool makers were enumerated. Again, although the colonial policy of France under the old *régime* aimed at preventing the manufacture, in Canada, of any article which could be imported from the Mother Country, the uncertainties of transportation due to the colonial wars of the period—France and England were at war for 34 of the 74 years between 1689 and 1763—led to a necessary relaxation of restrictions. From the introduction of sheep raising and the manufacture of home-spun woollens arose the important textile industries of to-day, which are able to produce the finest fabrics of cotton, wool or silk.

Under the British *régime*, shipbuilding was conducted on a large scale in Quebec and New Brunswick, the industry reaching its climax of prosperity about 1865 when 105 Quebec-built ships with a total tonnage of 59,333 were registered. Thereafter, iron and steel ships gradually supplanted the wooden vessels, but the forests of Canada have since provided the raw material for the pulp and paper and other important industries.

One of the chief factors in the progress of Canada is the possession of many natural resources favourable to industrial growth. It is upon the country's agricultural resources, forests, minerals, and water powers that Canada's industries are mainly based. The fish and fur resources also make an important contribution of raw materials to the manufacturing industries of the Dominion. Nevertheless, the comparatively small home market, a large part of it in scattered agricultural areas, has always been one of the difficulties of the situation. In spite of this, Canada is now not merely the second largest manufacturing country in the British Empire; her exports to the other Dominions consist largely of manufactured goods and her exports of manufactured and partly manufactured goods to the United States exceed the exports of raw materials. The rate at which this movement is to continue will depend almost entirely upon the further development of the many-sided physical assets of the country. The ore used in the manufacture of iron and steel in Canada, as well as the coal which has supplied the manufacturing industries with power, has, in the main, been imported from the United States, chiefly because the principal

* Revised by A. Cohen, B.Com., Chief, General Manufactures Branch, Dominion Bureau of Statistics. This Branch publishes individual reports on the vegetable products, textile, and miscellaneous manufacturing industries, also reports on the manufacturing industries generally for Canada and the provinces. For a complete list of publications of this Branch, see Chapter XXIX, Section 1, under "Production".

manufacturing centres of this country in the St. Lawrence and Great Lakes region are fairly conveniently situated with regard to the coal and iron supplies of the United States and far away from the coal and iron supplies of the Maritime Provinces. In recent years coal has been increasingly replaced by electric power. The great bulk of the pig iron used in Canadian manufactures is made in domestic blast furnaces.

Subsection 1.—Growth of Manufacturing in Canada since 1870.

Growth of Canadian Manufactures Prior to the War.—Until the later '90's, the growth of Canadian manufacturing industries was not particularly rapid, though the great fall in the prices of commodities during the period from 1873 to 1897 was largely responsible for the comparatively slow growth of the values of manufactured commodities from \$221,600,000 in 1870 to \$469,800,000 in 1890. Afterwards there was a change and the prices of commodities commenced to rise, while the industries generally shared in the advantages of the great growing period from 1900 to 1912. The gross product of establishments with five hands or over increased from \$368,700,000 in 1890 to \$1,166,000,000 in 1910 and to \$1,381,500,000 in 1915. The fundamental advantages of the position of Canada, her abundant raw material, her inexhaustible water power, her growing home market in the expanding West, had contributed to this result.

The Influence of the War.—The influence of the War upon the manufactures of Canada was profound and far-reaching, tending to promote the diversification of products and the production at home of many commodities which had been imported previously. On account of the practical suspension of the importation of manufactured goods of many kinds from Europe, enterprising Canadian manufacturers were given opportunities of entering upon new lines of manufacture with practical control of the market. There was added to this the reflex effect of the great prosperity of agriculture, produced by the unprecedented prices of war time, with the general result that industry worked at high pressure. Incidentally, factory methods become more specialized and a high degree of administrative and mechanical efficiency was attained, and Canada, partly owing to the absorption of the energies of Europe in the War, assumed a new position as one of the leading manufacturing countries of the world. The inflation of the war period also led to unprecedented figures of values produced.

This great boom in Canadian manufactures reached its height in the summer of 1920. Gross values in 1929, however, reached a higher point than in the post-war boom of 1920, although the prices of manufactured goods had dropped about 41 p.c. in the intervening period.

Effects of the Depression on the Manufacturing Industries of Canada.—The downward trend in manufacturing operations which began in the fall of 1929 continued with increasing force to about the middle of 1933. As a result, the output of manufactured products in 1933, valued at \$2,086,847,847, was the lowest annual average reached since 1917. This was a decrease of 48.2 p.c. as compared with the peak year of 1929. In 1935 the value of production amounted to \$2,807,337,381, an increase of 10.8 p.c. over the previous year, but still 30.3 p.c. below the 1929 level. The number of persons employed decreased from 694,434 in 1929 to 493,903 in 1933, a drop of 28.9 p.c. For 1935, however, the number of employees was 582,874, an increase of 6.9 p.c. over the 1934 figures. In spite of this increase, the employees in 1935 still numbered 16.1 p.c. below the 1929 figure. The decline in salary and

wage payments exceeded even that of the number of employees, the drop between 1929 and 1933 being \$347,487,752 or 42.7 p.c. In 1935 the increase in salary and wage payments amounted to \$124,764,814 over 1933 and \$56,732,269 over 1934. Average earnings per employee, which in 1933 amounted to \$943, represented a decrease of 19.5 p.c. from the average earnings of \$1,171 in 1929. For 1935 average earnings were \$1,013. Table 8, p. 417, shows the percentage variation in employment, salary and wage payments and value of production since 1929.

The growth of manufacturing production since 1870 is shown in Table 1 following, while the increasing importance of Canadian manufacturing for the international market may be illustrated by the fact that Canadian exports of manufactured produce increased from less than \$3,000,000 per annum on the average of 1871-75 to \$614,000,000 in the post-war fiscal year ended Mar. 31, 1920. Exports of "fully or chiefly manufactured" products in the fiscal year ended Mar. 31, 1936, amounted in value to \$324,239,689, and exports of "partly manufactured" products to \$260,962,269 (see pp. 568-569 of the 1937 Year Book).

1.—Historical Summary of Statistics of Manufactures for the Dominion, 1870-1936.

NOTE.—Prior to 1929, totals for the chemical industries included the value placed on intermediate products used in further processes in the producing works. To this extent, totals are not comparable to those of 1929 and subsequent years. Further, statistics of the non-ferrous metal smelting industries were included in manufactures for the first time in 1925.

Year.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and Wages.	Cost of Materials.	Net Value of Products. ¹	Gross Value of Products.
	No.	\$	No.	\$	\$	\$	\$
(All establishments irrespective of the number of employees.)							
1870.....	41,259	77,964,020	187,942	40,851,009	124,907,846	96,709,927	221,617,773
1880.....	49,722	165,302,623	254,935	59,429,002	179,918,593	129,757,475	309,676,068
1890.....	75,964	353,213,000	369,595	100,415,350	250,759,292	219,088,594	469,847,886
(Establishments with five hands and over.)							
1890.....	14,065	2	272,033	79,234,311	2	2	368,696,723
1900.....	14,650	446,916,487	339,173	113,249,350	266,527,858	214,525,517	481,053,375
1910.....	19,218	1,247,583,609	515,203	241,008,416	601,509,018	564,466,621	1,165,975,639
1915.....	15,593	1,958,705,230	2	283,311,505	791,943,433	589,603,792	1,381,547,225
(All establishments irrespective of the number of employees.)							
1917.....	22,838	2,696,154,030	621,694	509,382,027	1,541,087,416	1,332,180,767	2,873,268,183
1918.....	22,910	2,926,815,424	618,305	582,457,488	1,829,040,369	1,460,723,777	3,289,764,146
1919.....	23,249	3,095,025,799	611,008	618,463,139	1,780,629,840	1,509,870,745	3,290,500,585
1920.....	23,351	3,371,940,653	609,586	732,120,585	2,085,271,649	1,686,978,408	3,772,250,057
1921.....	22,235	3,190,026,358	456,076	518,785,137	1,366,893,685	1,209,143,344	2,576,037,029
1922.....	22,541	3,244,302,410	474,430	510,431,312	1,283,774,723	1,198,434,407	2,482,209,130
1923.....	22,642	3,380,322,950	525,267	571,470,028	1,470,140,139	1,311,025,375	2,781,165,514
1924.....	22,178	3,538,813,460	508,503	559,884,045	1,438,409,681	1,180,699,241 ¹	2,695,053,582
1925.....	22,331	3,808,309,981	544,225	596,015,171	1,587,665,408	1,280,504,159 ¹	2,948,545,315
1926.....	22,708	3,981,569,590	581,539	653,850,933	1,728,624,192	1,406,574,164 ¹	3,221,269,231
1927.....	22,936	4,337,631,558	618,933	693,932,328	1,758,789,334	1,544,296,557 ¹	3,394,713,270
1928.....	23,379	4,780,296,049	658,023	755,199,372	1,919,438,703	1,725,338,540 ¹	3,735,484,728
1929.....	23,597	5,083,014,754	694,434	813,049,842	2,032,020,975	1,894,910,456 ¹	4,029,371,340
1930.....	24,020	5,203,316,760	614,439	736,092,764	1,666,983,902	1,665,631,770 ¹	3,428,970,628
1931.....	24,501	4,961,312,408	557,426	624,545,561	1,223,880,011	1,390,409,237 ¹	2,698,461,862
1932.....	24,544	4,741,255,610	495,398	505,883,323	955,968,683	1,097,284,291 ¹	2,126,194,555
1933.....	25,232	4,689,373,704	493,903	465,562,090	969,188,574	1,048,259,450 ¹	2,086,847,847
1934.....	25,663	4,703,917,730	545,162	533,594,635	1,230,977,053	1,222,943,899 ¹	2,533,758,954
1935.....	25,491	4,698,991,853	582,874	590,326,904	1,420,885,153	1,302,179,099 ¹	2,807,337,381
1936 ²	24,202	3,271,263,531	594,359	612,071,434	1,624,213,996	1,289,592,672 ¹	3,002,403,814

¹ In accordance with a resolution passed by the Conference of British Commonwealth Statisticians, 1935, the net value of production is now computed by subtracting the cost of fuel and electricity as well as the cost of materials from the gross value of the products. Prior to this, only the cost of materials was deducted. The figures for 1924 and later years have been revised in accordance with this resolution. The revision could not be carried back further as statistics for cost of electricity are not available for years prior to 1924.

² Not reported.

³ Central electric stations, and dyeing, cleaning and laundry work ceased to be regarded as 'manufacturing' industries for 1936 and adjustments for earlier years will be made in the near future. This affects the comparability of the figures for 1936.

2.—Summary Statistics of Manufactures, by Provinces, for Representative Years, 1917-36.

NOTE.—See headnote, Table 1, p. 405.

Year and Province.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and Wages.	Cost of Materials.	Net Value of Products. ¹	Gross Value of Products.
	No.	\$	No.	\$	\$	\$	\$
1917.							
Canada	22,838	2,696,154,030	621,694	509,382,027	1,541,087,416	1,332,180,767	2,873,268,183
P.E. Island.....	418	2,225,482	1,588	683,149	3,088,718	1,816,986	4,905,704
Nova Scotia.....	1,387	128,052,239	25,814	19,177,657	102,456,085	58,751,437	161,207,522
New Brunswick.....	987	64,010,777	20,201	13,192,740	32,466,048	27,996,000	60,462,048
Quebec.....	7,193	793,589,489	191,969	143,291,802	385,486,685	396,539,787	782,026,472
Ontario.....	9,471	1,302,675,630	306,270	264,442,393	795,095,511	685,063,845	1,480,159,356
Manitoba.....	816	95,580,452	20,055	17,381,806	69,884,850	45,062,533	114,947,383
Saskatchewan.....	633	30,096,623	6,846	5,906,150	22,093,445	15,529,428	37,622,873
Alberta.....	720	60,552,814	10,191	9,323,221	42,725,021	26,105,121	68,830,142
Br. Columbia.....	1,202	215,681,355	38,689	35,864,308	87,764,650	74,978,844	162,743,494
Yukon.....	11	3,739,169	71	118,801	26,403	336,786	363,189
1920.							
Canada	23,351	3,371,940,653	609,586	732,120,585	2,085,271,649	1,686,978,408	3,772,250,057
P.E. Island.....	384	2,734,719	1,327	888,121	4,164,223	2,221,746	6,385,969
Nova Scotia.....	1,388	141,549,856	23,834	26,127,781	85,724,785	63,274,708	148,999,493
New Brunswick.....	928	105,671,688	19,241	19,505,048	60,812,641	46,910,631	107,723,272
Quebec.....	7,677	1,028,226,105	186,308	205,829,155	553,558,520	517,693,125	1,071,251,645
Ontario.....	9,473	1,668,079,488	300,794	369,846,193	1,071,843,374	822,670,783	1,894,414,157
Manitoba.....	773	112,896,616	24,381	33,357,872	92,729,271	65,492,637	158,221,908
Saskatchewan.....	639	31,727,162	7,182	10,249,392	34,894,105	24,655,529	59,549,634
Alberta.....	722	61,063,132	11,337	15,903,609	56,139,646	32,466,428	88,606,074
Br. Columbia and Yukon....	1,367	219,991,887	35,132	50,413,414	125,405,084	111,692,821	237,097,905
1922.							
Canada	22,541	3,244,302,410	474,430	510,431,312	1,283,774,723	1,198,434,407	2,482,209,130
P.E. Island.....	352	2,946,329	1,127	628,540	2,621,443	1,787,569	4,409,012
Nova Scotia.....	1,163	106,647,616	14,286	12,192,652	38,003,168	29,985,794	67,988,962
New Brunswick.....	897	82,230,895	14,351	12,201,014	38,059,376	26,821,281	64,880,657
Quebec.....	7,410	970,019,442	147,952	144,368,667	337,752,977	370,276,067	708,029,044
Ontario.....	9,388	1,696,738,996	243,297	275,559,006	678,746,675	617,752,828	1,296,499,503
Manitoba.....	781	88,779,517	14,188	18,274,012	54,630,668	41,326,416	95,957,084
Saskatchewan.....	614	31,101,612	4,196	5,618,174	22,450,051	16,357,481	38,807,532
Alberta.....	672	55,514,624	7,461	9,493,543	30,306,395	22,813,091	53,119,486
Br. Columbia and Yukon....	1,264	210,323,379	27,572	32,095,704	81,203,970	71,313,880	152,517,850
1926.							
Canada	22,708	3,981,569,590	581,539	653,850,933	1,728,624,192	1,406,574,164	3,221,269,231
P.E. Island.....	299	2,850,010	2,261	690,403	2,637,960	1,309,170	4,069,051
Nova Scotia.....	1,163	118,050,902	16,782	13,014,707	39,137,265	30,751,779	72,956,768
New Brunswick.....	910	95,661,154	17,674	14,609,734	44,074,961	27,453,289	73,661,794
Quebec.....	7,164	1,216,975,958	180,669	189,326,145	442,927,613	429,957,781	899,644,124
Ontario.....	9,457	1,985,165,921	280,353	335,164,239	908,044,673	711,978,793	1,661,379,326
Manitoba.....	797	127,445,924	21,201	26,973,850	75,000,529	54,646,677	132,129,988
Saskatchewan.....	674	33,943,060	4,904	6,397,545	29,128,035	16,129,107	47,093,432
Alberta.....	749	72,468,286	10,233	12,808,554	49,826,532	31,404,783	83,059,494
Br. Columbia and Yukon....	1,495	329,008,375	47,462	54,865,756	137,846,624	102,942,785	247,275,254
1929.							
Canada	23,597	5,083,014,754	694,434	813,049,842	2,032,020,975	1,894,910,456	4,029,371,340
P.E. Island.....	276	3,489,934	2,133	781,448	2,864,383	1,655,710	4,638,277
Nova Scotia.....	1,195	135,682,325	20,966	17,925,190	50,781,055	39,140,013	93,567,348
New Brunswick.....	860	117,965,970	18,517	15,712,322	59,845,223	29,051,944	70,825,664
Quebec.....	7,156	1,673,011,042	213,467	233,803,672	537,828,611	583,498,096	1,155,201,014
Ontario.....	9,910	2,418,340,460	339,859	421,789,723	1,057,407,249	975,407,258	2,080,391,439
Manitoba.....	923	173,152,948	26,318	34,158,588	88,055,264	71,933,922	163,806,010
Saskatchewan.....	761	58,877,124	8,047	10,438,759	51,143,205	26,749,229	80,435,537
Alberta.....	817	107,648,028	13,748	16,460,038	62,700,608	41,989,415	106,824,476
Br. Columbia and Yukon....	1,699	394,866,933	51,379	61,980,107	141,395,677	125,484,869	273,681,585
1933.							
Canada	25,232	4,689,373,704	493,903	465,562,090	969,188,574	1,048,259,450	2,086,847,847
P.E. Island.....	263	3,386,095	1,065	597,980	1,592,301	1,384,072	3,077,817
Nova Scotia.....	1,378	123,645,961	13,260	10,701,189	25,402,432	24,356,279	52,901,937
New Brunswick.....	800	122,130,573	11,994	9,877,690	20,471,624	21,453,127	44,826,347
Quebec.....	8,070	1,648,872,387	163,571	141,358,231	292,950,595	336,407,772	653,066,534
Ontario.....	10,158	2,087,072,413	235,810	234,391,900	465,106,584	510,578,550	1,005,233,502
Manitoba.....	1,073	179,720,120	20,749	20,699,449	44,697,266	44,608,801	91,408,411
Saskatchewan.....	818	64,950,579	5,614	5,871,180	19,104,919	15,251,760	36,199,608
Alberta.....	975	98,345,221	10,944	10,896,132	29,505,155	23,838,049	54,642,706
Br. Columbia and Yukon....	1,697	361,250,355	30,896	31,168,339	70,297,698	70,381,040	145,490,955

¹ See footnote 1 to Table 1, p. 405.

2.—Summary Statistics of Manufactures, by Provinces, for Representative Years, 1917-36—concluded.

Year and Province.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and Wages.	Cost of Materials.	Net Value of Products. ¹	Gross Value of Products.
	No.	\$	No.	\$	\$	\$	\$
1934.							
Canada.....	25,663	4,703,917,730	545,163	533,594,635	1,230,977,053	1,222,943,899 ¹	2,533,758,954
P.E. Island.....	273	3,517,088	1,093	600,216	1,921,421	1,281,040 ¹	3,302,586
Nova Scotia.....	1,386	119,064,747	15,041	12,401,325	28,497,123	28,406,917 ¹	60,844,581
New Brunswick.....	847	123,476,314	13,522	11,367,625	24,637,918	26,357,257 ¹	54,057,847
Quebec.....	8,168	1,678,486,302	181,546	161,197,908	357,751,720	380,453,666 ¹	766,498,000
Ontario.....	10,322	2,063,721,375	259,621	270,834,102	610,485,807	611,303,863 ¹	1,255,325,701
Manitoba.....	1,077	183,937,703	21,723	22,020,990	54,719,469	48,484,665 ¹	105,358,000
Saskatchewan.....	845	65,975,159	5,986	6,093,983	24,289,080	16,238,427 ¹	42,261,723
Alberta.....	968	98,418,699	11,565	11,775,745	40,381,587	27,576,875 ¹	69,389,118
Br. Columbia and Yukon....	1,777	367,320,343	35,065	37,302,741	88,292,928	82,841,189 ¹	176,721,398
1935.							
Canada.....	25,491	4,698,991,853	582,874	590,326,904	1,420,885,153	1,302,179,099 ¹	2,807,337,381
P.E. Island.....	261	3,508,905	1,108	618,406	1,894,409	1,362,405 ¹	3,356,006
Nova Scotia.....	1,350	118,999,064	16,060	14,042,674	31,647,800	30,995,130 ¹	67,109,172
New Brunswick.....	872	115,635,668	13,937	11,680,095	25,561,371	27,643,366 ¹	56,344,190
Quebec.....	7,942	1,664,198,107	189,671	173,354,585	398,566,702	393,805,691 ¹	821,020,796
Ontario.....	10,266	2,064,194,151	281,438	303,807,207	718,570,816	668,918,734 ¹	1,423,562,474
Manitoba.....	1,099	198,822,314	23,239	24,701,066	67,929,760	47,949,314 ¹	117,734,292
Saskatchewan.....	880	66,271,171	6,355	6,524,411	28,046,921	16,976,149 ¹	46,821,302
Alberta.....	1,002	96,322,781	12,087	12,504,449	42,831,636	28,932,217 ¹	73,282,607
Br. Columbia and Yukon....	1,819	371,039,792	38,979	43,094,011	105,845,738	86,196,093 ¹	198,106,542
1936. ²							
Canada.....	24,202	3,271,263,531	594,359	612,071,434	1,624,213,996	1,289,592,672 ¹	3,002,403,814
P.E. Island.....	233	2,394,532	996	553,008	2,200,028	1,055,201 ¹	3,311,223
Nova Scotia.....	1,158	87,888,353	15,944	13,784,556	36,077,900	27,788,510 ¹	67,784,970
New Brunswick.....	784	81,468,098	13,710	11,855,051	29,292,851	23,781,487 ¹	56,225,201
Quebec.....	7,969	1,029,546,039	194,876	182,319,454	455,027,759	377,614,998 ¹	863,687,389
Ontario.....	9,753	1,588,484,130	288,992	314,872,843	822,884,081	686,470,917 ¹	1,547,551,931
Manitoba.....	1,011	118,515,841	22,507	24,490,299	74,374,078	45,015,577 ¹	122,050,502
Saskatchewan.....	694	42,055,557	5,782	6,013,378	35,311,152	15,185,500 ¹	51,604,510
Alberta.....	905	70,224,878	11,756	12,328,471	47,684,029	25,000,136 ¹	74,052,010
Br. Columbia and Yukon....	1,695	250,686,403	39,796	45,854,374	121,362,118	87,780,346 ¹	216,136,078

¹ See footnote 1 to Table 1, p. 405. ² Central electric stations, and dyeing, cleaning and laundry work ceased to be regarded as 'manufacturing' industries for 1936 and adjustments for earlier years will be made in the near future. This affects the comparability of the figures for 1936.

3.—Summary Statistics of Manufactures, by Industrial Groups, for Representative Years, 1917-36.

NOTE.—See headnote, Table 1, p. 405.

Year and Industrial Group.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and Wages.	Cost of Materials.	Net Value of Products. ¹	Gross Value of Products.
	No.	\$	No.	\$	\$	\$	\$
1917.							
Totals.....	22,838	2,696,154,030	621,694	509,382,027	1,541,087,416	1,332,180,767	2,873,268,183
Vegetable products.....	3,816	274,722,765	61,288	44,780,329	365,483,923	181,072,143	546,556,066
Animal products.....	5,486	207,165,245	46,994	35,753,133	320,302,039	124,103,990	444,406,029
Textile products.....	1,360	196,823,197	82,639	51,189,060	132,479,763	115,739,096	248,218,859
Wood and paper.....	7,255	537,731,225	153,751	115,137,384	149,927,482	248,986,564	398,914,046
Iron and its products.....	1,404	634,642,989	142,416	140,334,255	357,688,333	334,616,810	692,305,143
Non-ferrous metals.....	296	69,421,911	18,220	15,898,890	46,445,469	41,039,351	87,484,820
Non-metallic minerals.....	1,410	150,328,144	22,284	19,360,952	38,724,530	60,802,754	99,527,284
Chemicals and allied products ² ..	539	175,836,690	56,153	51,505,484	99,068,092	131,381,995	230,450,087
Miscellaneous industries.....	606	93,477,696	29,102	27,644,825	30,967,785	49,901,216	80,869,001
Central electric stations.....	666	356,004,168	8,847	7,777,715	Nil	44,536,848	44,536,848

¹ See footnote 1 to Table 1, p. 405. ² These figures do not correspond with those published in the Annual Report on Chemicals and Allied Products; the latter are revised and are directly comparable with those given here for 1929-36. See also headnote to Table 1, p. 405.

3.—Summary Statistics of Manufactures, by Industrial Groups, for Representative Years, 1917-36—continued.

Year and Industrial Group.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and Wages.	Cost of Materials.	Net Value of Products. ¹	Gross Value of Products.
	No.	\$	No.	\$	\$	\$	\$
1920.							
Totals.....	23,351	3,371,940,653	609,586	732,120,585	2,085,271,649	1,686,978,408	3,772,250,057
Vegetable products.....	4,219	394,123,233	72,380	75,695,530	532,484,195	234,317,527	766,801,722
Animal products.....	4,823	221,792,457	48,687	54,291,606	400,496,354	152,995,130	553,491,484
Textile products.....	1,304	302,758,185	87,730	84,433,609	256,233,300	173,741,035	429,974,335
Wood and paper.....	7,867	772,086,812	143,731	171,610,460	308,282,232	415,784,276	724,066,508
Iron and its products.....	1,690	642,904,322	146,204	205,414,599	349,642,666	365,473,097	715,115,763
Non-ferrous metals.....	324	109,382,033	23,162	27,895,343	48,434,120	52,847,178	101,281,298
Non-metallic minerals.....	1,176	223,541,735	27,361	34,406,423	74,200,407	85,216,316	159,416,723
Chemicals and allied products ² ..	464	122,123,730	17,653	22,193,421	62,644,608	65,183,212	127,827,820
Miscellaneous industries.....	665	134,954,504	31,985	41,552,885	52,853,767	75,715,577	128,569,344
Central electric stations.....	819	448,273,642	10,693	14,626,709	Nil	65,705,060	65,705,060
1922.							
Totals.....	22,541	3,244,302,410	474,430	510,431,312	1,283,774,723	1,198,434,407	2,482,209,130
Vegetable products.....	4,355	371,361,682	63,217	64,424,922	330,589,052	206,946,749	537,535,801
Animal products.....	5,118	201,829,414	49,595	49,933,679	264,078,631	107,473,382	371,552,013
Textile products.....	1,709	268,065,238	88,048	76,224,361	153,066,593	155,493,510	308,560,103
Wood and paper.....	6,983	761,188,396	118,462	132,084,914	206,682,820	283,131,962	489,814,782
Iron and its products.....	1,040	526,109,953	74,588	90,605,157	168,282,265	163,302,638	331,584,903
Non-ferrous metals.....	325	102,208,275	18,222	21,451,629	30,861,895	39,993,798	70,855,693
Non-metallic minerals.....	1,095	238,691,461	22,468	27,204,642	63,377,262	77,911,159	141,288,421
Chemicals and allied products ² ..	469	118,025,483	14,082	16,770,503	47,039,926	48,904,259	95,944,185
Miscellaneous industries.....	542	88,753,756	15,064	17,236,255	19,796,279	32,948,084	52,744,363
Central electric stations.....	905	568,068,752	10,684	14,495,250	Nil	82,328,866	82,328,866
1926.							
Totals.....	22,708	3,981,569,590	581,539	653,850,933	1,728,624,192	1,406,574,164	3,221,269,231
Vegetable products.....	4,529	449,259,094	73,908	75,349,586	414,316,414	234,330,172	658,320,716
Animal products.....	4,896	223,938,559	67,843	60,208,986	329,114,267	118,071,730	452,034,925
Textile products.....	1,698	317,275,429	100,572	88,596,752	202,832,383	158,203,397	366,334,644
Wood and paper.....	6,751	929,589,278	134,187	160,916,729	261,001,976	314,685,753	600,064,661
Iron and its products.....	1,142	597,982,098	103,510	137,640,065	258,020,373	234,326,351	505,188,849
Non-ferrous metals.....	403	202,503,426	30,095	39,201,147	90,613,004	84,993,291	183,501,723
Non-metallic minerals.....	1,240	261,724,184	26,045	31,986,949	82,293,319	77,491,488	174,156,923
Chemicals and allied products ² ..	556	133,407,891	14,345	18,309,377	60,124,582	58,718,891	122,589,526
Miscellaneous industries.....	436	109,669,565	17,628	21,703,342	30,307,874	38,956,740	70,143,531
Central electric stations.....	1,057	756,220,066	13,406	19,943,000	Nil	86,796,351	88,933,733
1929.							
Totals.....	23,597	5,083,014,754	694,434	813,049,842	2,032,020,975	1,894,910,456	4,029,371,340
Vegetable products.....	5,005	569,064,835	88,858	93,299,665	427,019,724	334,152,957	771,457,665
Animal products.....	4,490	243,825,065	67,670	62,081,423	345,351,882	127,929,857	477,761,855
Textile products.....	1,891	383,153,797	115,620	105,896,237	220,304,250	200,123,532	426,247,547
Wood and paper.....	7,405	1,152,075,234	164,800	192,235,448	314,203,289	381,913,307	725,819,780
Iron and its products.....	1,169	754,989,105	132,281	186,928,700	334,925,660	336,378,090	738,012,980
Non-ferrous metals.....	408	298,721,106	39,867	54,501,806	124,900,632	150,415,215	283,545,666
Non-metallic minerals.....	1,188	329,448,844	31,431	41,511,846	117,149,130	106,601,828	242,023,518
Chemicals and allied products...	554	165,886,912	16,694	22,639,449	55,184,337	78,785,911	138,545,221
Miscellaneous industries.....	463	130,118,324	21,049	29,123,447	42,982,071	58,740,708	103,073,662
Central electric stations.....	1,024	1,055,731,532	16,164	24,831,821	Nil	119,869,051	122,883,446

¹ See footnote 1 to Table 1, p. 405.² These figures do not correspond with those published in the Annual Report on Chemicals and Allied Products; the latter are revised and are directly comparable with those given here for 1929-36. See also headnote to Table 1, p. 405.

3.—Summary Statistics of Manufactures, by Industrial Groups, for Representative Years, 1917-36—concluded.

Year and Industrial Group.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and Wages.	Cost of Materials.	Net Value of Products. ¹	Gross Value of Products.
	No.	\$	No.	\$	\$	\$	\$
1933.							
Totals.....	25,232	4,689,373,704	493,903	465,562,090	969,188,574	1,048,259,450¹	2,086,847,847
Vegetable products.....	5,542	509,533,005	73,095	66,137,487	224,243,088	189,134,032 ¹	421,849,872
Animal products....	4,496	201,993,642	53,111	46,453,188	179,429,948	87,629,444 ¹	271,068,210
Textile products....	2,151	322,312,247	106,235	80,695,813	144,584,507	143,990,608 ¹	294,715,248
Wood and paper....	7,917	893,309,680	105,471	102,500,377	134,979,700	184,723,329 ¹	342,155,077
Iron and its products.....	1,291	580,760,379	70,947	69,482,730	97,705,853	105,667,318 ¹	211,961,908
Non-ferrous metals.....	478	266,266,443	25,273	28,099,026	71,990,608	88,427,984 ¹	164,765,604
Non-metallic minerals.....	1,144	307,996,274	19,296	21,680,263	71,713,986	60,503,998 ¹	141,791,451
Chemicals and allied products....	696	153,900,930	15,397	18,738,629	34,271,854	55,394,284 ¹	92,820,761
Miscellaneous industries.....	476	66,769,049	10,361	10,342,700	10,269,030	17,124,800 ¹	28,187,635
Central electric stations.....	1,041	1,386,532,055	14,717	21,431,877	Nil	115,663,653 ¹	117,532,081
1934.							
Totals.....	25,663	4,703,917,730	545,162	533,594,635	1,230,977,053	1,222,943,899¹	2,533,758,954
Vegetable products.....	5,656	506,714,365	77,464	71,389,376	260,491,348	210,899,307 ¹	480,314,618
Animal products....	4,504	210,260,801	57,199	50,191,368	226,262,465	94,998,316 ¹	325,703,663
Textile products....	2,234	328,362,816	115,695	90,796,601	174,532,597	160,723,494 ¹	342,054,586
Wood and paper....	8,075	884,503,673	116,691	117,360,969	155,389,258	223,240,884 ¹	404,435,948
Iron and its products.....	1,255	547,892,157	81,782	88,924,168	154,055,806	143,369,504 ¹	308,303,352
Non-ferrous metals.....	488	263,488,479	30,177	35,097,986	119,713,328	112,155,502 ¹	237,233,670
Non-metallic minerals.....	1,164	307,338,479	21,959	24,905,554	84,508,166	71,357,352 ¹	166,782,852
Chemicals and allied products....	736	156,788,418	17,130	20,919,740	41,998,776	62,216,030 ¹	108,052,039
Miscellaneous industries.....	508	67,716,376	12,091	12,179,382	14,025,309	21,521,517 ¹	36,414,643
Central electric stations.....	1,043	1,430,852,166	14,974	21,829,491	Nil	122,461,993 ¹	124,463,613
1935.							
Totals.....	25,491	4,698,991,853	582,874	590,326,904	1,420,885,153	1,302,179,099¹	2,807,337,381
Vegetable products.....	5,402	496,256,485	79,285	74,859,447	283,681,945	217,051,454 ¹	509,822,142
Animal products....	4,402	211,672,508	60,124	54,035,134	247,375,247	99,633,595 ¹	351,643,587
Textile products....	2,275	329,197,254	120,699	96,574,954	183,920,438	166,228,533 ¹	357,106,277
Wood and paper....	8,186	873,756,949	123,724	128,196,524	175,040,681	239,387,227 ¹	441,160,387
Iron and its products.....	1,249	555,144,467	95,426	110,402,366	203,981,458	173,634,965 ¹	390,228,929
Non-ferrous metals.....	505	261,625,967	33,613	40,315,477	174,906,971	107,898,470 ¹	288,523,250
Non-metallic minerals.....	1,188	300,455,725	23,342	27,425,224	88,969,870	75,846,415 ¹	176,184,717
Chemicals and allied products....	734	147,472,534	18,933	23,715,305	48,316,876	66,001,290 ¹	118,574,228
Miscellaneous industries.....	509	63,588,796	12,270	12,282,480	14,691,667	21,437,115 ¹	36,978,953
Central electric stations.....	1,041	1,459,821,168	15,458	22,519,993	Nil	135,060,035 ¹	137,114,911
1936.²							
Totals.....	24,202	3,271,263,531	594,359	612,071,434	1,624,213,996	1,289,592,672¹	3,002,403,814
Vegetable products.....	5,824	524,164,493	87,071	84,397,961	333,562,766	254,135,013 ¹	597,461,635
Animal products....	4,433	222,299,844	63,609	57,829,529	283,265,546	109,823,848 ¹	397,955,241
Textile products....	1,879	316,273,003	114,966	95,016,170	197,336,683	162,677,272 ¹	366,285,008
Wood and paper....	8,175	874,592,781	132,374	141,301,340	205,978,921	261,020,034 ¹	497,103,666
Iron and its products.....	1,317	600,424,322	107,203	126,537,657	227,886,781	211,572,641 ¹	453,385,553
Non-ferrous metals.....	512	266,322,074	36,935	45,091,191	212,783,636	132,423,707 ¹	351,164,860
Non-metallic minerals.....	803	282,596,535	21,974	26,402,410	96,534,218	68,707,776 ¹	177,771,597
Chemicals and allied products....	745	147,664,533	19,910	25,227,267	52,482,873	69,854,217 ¹	126,874,791
Miscellaneous industries.....	514	36,925,946	10,317	10,267,909	14,382,572	19,378,164 ¹	34,401,463
Central electric stations.....	2	3	2	2	11	2	2

¹ See footnote 1 to Table 1, p. 405. ² Central electric stations, and dyeing, cleaning and laundry work ceased to be regarded as 'manufacturing' industries for 1936 and adjustments for earlier years will be made in the near future. This affects the comparability of the totals for 1936.

Summary Statistics of Manufactures.—In Table 4 will be found an analysis of the most important statistics of manufactures for the period 1917 to 1936, brought together in order that the tendencies in Canadian manufacturing industries may be traced as clearly as possible through this latest period of their development. In analysing statistics of production and materials used, it should be borne in mind that, due to the inflation of values during the War and immediate post-war periods and the drop in prices of commodities during the depressions of 1921 and 1930, the figures for these years become largely incomparable. One very important figure, however, which shows the trend of development clearly and uninterruptedly, is concerned with the use of power. In the analysis on p. 411 the aim is to show the position of power as a factor in general manufacturing production. Therefore, the power installation of central electric stations has been excluded. The total horse-power employed increased from 1,664,578 in 1917 to 4,346,775 in 1935, an increase of 162 p.c. in eighteen years. In the same period horse-power per wage-earner increased from 3.04 to 9.29, indicating the rapidly increasing utilization of electric power in manufacturing production. The significant feature is the increase in both the absolute figures of power employed and the average per wage-earner during the depression years as compared with 1929, although the large numbers of persons finding employment during 1934 and 1935 have reduced averages for those years compared with 1933. Another interesting comparison is the downward trends of value added by manufacture per employee and of average salaries and wages paid since 1929. However, compared with 1917 the figures for average salaries and wages in 1935 represent an increase of 23.7 p.c., while the increase in the value added by manufacture per employee is only 4.3 p.c., and wholesale prices of commodities declined 36.9 p.c. in the same period.

In using the figures for 1936 it is important to note that central electric stations, and dyeing, cleaning and laundry work are no longer regarded as 'manufacturing' industries. This change affects all the data for 1936 in Table 4, but especially the figures for capital. The apparent reduction of approximately 30 p.c. in capital is more than accounted for by the omission of these industries.

Value of Products.—The gross value of manufactured products in 1935 was reported as \$2,807,337,381; the cost of materials, including fuel and electricity, was \$1,505,158,282, leaving \$1,302,179,099 as the value added by manufacture. As the finished products of one branch of manufacture are constantly used as materials in other branches in the ascending scale of modern industry, it follows that they are counted over and over again, swelling in this manner the total gross value of products. The total value of manufactured products, strictly defined, would include: (1) the value of all raw materials obtained from the extractive and primary production industries which have entered into the manufacturing output; and (2) the entire value added to these raw materials by manufacturing processes from the time they first entered any factory up to the close of the census year. This total value would be very much greater than the \$1,302,179,099 shown as having been added by manufacture, but not so great as the \$2,807,337,381 shown as the gross value of production. The value of products for 1936 is affected adversely in comparison with earlier years due to the fact that central electric stations are no longer regarded as a manufacturing industry.

4.—Summary Statistics of Manufactures for Representative Years, 1917-36.

Item.	1917.	1920.	1926. ¹	1929. ¹	1930. ¹	1933.	1934.	1935.	1936. ²
Establishments.....No.	22,838	23,351	22,708	23,597	24,020	25,232	25,663	25,491	24,202
Capital.....\$	2,696,154,030	3,371,040,653	3,981,569,590	5,083,014,754	5,203,316,760	4,689,373,704	4,703,917,730	4,608,991,853	3,271,263,531
Averages, per establishment...\$	118,056	144,402	175,338	215,409	216,624	185,850	183,296	184,331	135,165
Averages, per employee.....\$	4,337	6,486	7,320	8,074	8,074	9,494	8,628	8,062	5,504
Averages, per wage-earner.....\$	4,876	6,404	7,967	8,503	9,435	11,741	10,560	9,845	6,677
Totals, employees.....No.	621,694	609,586	581,539	694,434	644,439	493,903	545,162	582,874	594,359
Averages, per establishment...No.	27.2	26.1	25.6	29.4	26.8	19.6	21.2	22.9	24.6
Totals, salaries and wages.....\$	509,382,027	732,420,585	653,850,933	813,049,842	736,002,766	465,562,004	533,594,635	590,326,904	612,071,434
Averages, per establishment...\$	22,304	31,353	28,794	34,556	30,645	18,451	20,792	23,158	25,280
Averages, per employee.....\$	1,201	1,201	1,124	1,171	1,142	1,943	1,979	1,913	1,950
Employees on salaries.....No.	68,726	83,013	81,794	96,807	92,943	94,494	99,730	105,579	104,417
Averages, per establishment...No.	3.0	3.6	3.6	4.1	3.8	3.7	3.9	4.1	4.3
Salaries.....\$	89,287,158	148,267,360	152,705,944	188,747,672	184,239,117	151,860,323	160,986,876	173,020,195	173,198,067
Averages, per employee.....\$	1,299	1,786	1,867	1,954	1,982	1,607	1,614	1,639	1,659
Employees on wages.....No.	552,968	526,571	499,745	597,527	551,496	399,409	445,432	477,295	489,942
Averages, per establishment...No.	24.2	22.6	22.0	25.3	23.0	15.8	17.4	18.7	20.2
Wages.....\$	420,094,869	583,853,225	501,144,989	624,302,170	551,853,649	313,701,767	372,607,769	417,306,709	438,873,377
Averages, wages.....\$	760	1,109	1,003	1,045	1,001	785	837	874	896
Cost of materials.....\$	1,541,087,416	2,085,271,649	1,728,624,192	2,032,020,975	1,666,983,902	969,188,574	1,230,977,033	1,420,885,153	1,624,213,996
Averages, per establishment...\$	67,479	89,301	76,124	86,114	68,400	38,411	47,967	55,741	67,111
Averages, per employee.....\$	2,479	3,421	2,972	3,292	2,587	1,962	2,268	2,438	2,319
Values added in manufacture ³\$	1,332,180,767	1,686,978,408	1,406,574,164	1,894,910,456	1,665,691,770	1,048,259,450	1,232,943,899	1,289,592,672	1,289,592,672
Averages, per establishment ³\$	58,332	72,245	61,942	80,303	69,344	41,545	47,654	51,084	53,255
Averages, per employee ³\$	2,143	2,757	2,419	3,239	2,585	1,492	1,723	1,824	1,770
Gross values of products.....\$	2,873,268,133	3,772,450,057	3,221,260,231	4,029,371,340	3,428,970,628	2,086,847,847	2,533,785,954	2,807,337,381	3,002,408,814
Averages, per establishment...\$	125,801	161,546	141,856	170,758	142,755	82,706	98,732	110,130	124,056
Averages, per employee.....\$	4,622	6,188	5,539	6,802	5,321	4,225	4,648	4,816	4,816
Power employed ⁴h.p.	1,664,578	2,068,745	3,134,248	3,867,979	4,051,744	4,149,181	4,244,696	4,346,775	5,051
Averages, per establishment ⁴h.p.	75	92	145	176	172	172	172	178	178
Averages, per wage-earner ⁴h.p.	3.04	3.97	6.37	6.58	7.49	10.61	9.72	9.29	9.29

¹ A change in the method of computing the number of wage-earners in the years 1925 to 1930, inclusive, increased the number somewhat over that which the method otherwise used would have given. There was, therefore, a proportionate reduction in the averages for 1925-30 per employee and wage-earner, as compared with what these averages would have been under the other method. In 1931, however, the method in force prior to 1925 was redopted. The figures for 1931 and later years are, therefore, comparable with those for 1924 and earlier years.

² Central electric stations, and dyeing, cleaning and laundry work ceased to be regarded as 'manufacturing' industries for 1936 and adjustments will be made to the figures for prior years in the near future.

³ See footnote 1 to Table 1, p. 408. ⁴ These figures for power in this table represent the installation in manufacturing exclusive of central electric stations; statistics of central electric stations are also excluded from the number of establishments and of wage-earners in working out the averages.

⁵ Not available at time of going to press.

Subsection 2.—Volume and Consumption of Manufactured Products.

Volume of Manufacturing Production in Recent Years.*—An investigation of the greatest importance, especially in a period when values are rapidly changing, is that of the volume of manufacturing production as distinguished from its value. Since real income is ultimately measured in goods and services, the growth of the volume of manufactures becomes a matter of great significance. The important thing to know is whether consumers are getting more goods and services, not whether they are expending more dollars and cents.

The ever-increasing use of factory products is one of the most striking features of modern life. The process has continued until at the present time fresh fruits and vegetables are about the only articles which reach the consumer without, in some way, being first processed at a factory. Fresh milk is pasteurized and bottled in a dairy plant, fresh fish and meats are dressed principally in packing plants and the home preserving of fruits and vegetables is being superseded by more efficient processes in the canning factory. Thus even the foods we eat, as well as the clothing we wear, our household conveniences, and our instruments of production and transportation, are increasingly products of factories. The growing volume of factory production, therefore, measures approximately the total flow of the economic goods upon which the rising standards of modern life so vitally depend.

The statistics of manufactures afford a variety of measures of the growth of factory production. The number of wage-earners, capital invested, value of production and value added by manufacture all show to some extent the direction and volume of growth. The value of production and that added by manufacture, being reported in dollars, are influenced by price changes as well as the quantity of goods produced, and, as already explained, have become misleading under the violent price changes of the past fifteen years. The capital invested is also affected by changing money values, and the relation between capital invested and value of goods produced varies greatly as between one industry and another. Neither is the number of wage-earners employed likely to be a representative measure of changes in the volume of production. The progressively increasing use of machinery and the rise in the power installed per wage-earner (see Table 4) tend to increase the employee's output. Thus, while the reported wage-earners in 1935 had increased 6.8 p.c. from the number in 1923, the volume of production is estimated to have increased 30.2 p.c. in the same period.

The central electric stations were excluded from general manufactures in making the index, since this industry is unique in that the product is energy in contrast to physical commodities; it is also unique in the magnitude of capital investment and the smallness of its labour force in proportion to net production. The index is based on the quantities of manufactured products reported and includes 71.1 p.c. of the total value of the production in 1926, exclusive of central electric stations. It is weighted according to the values added by manufacture in 1926. A complete description of the manner in which the index is constructed will be found in the publication referred to in the footnote to this page.

The physical volume of manufacturing production, exclusive of central electric stations, increased 50.2 p.c. from 1923 to 1929. When it is recalled that the population of Canada is estimated to have increased only 11.3 p.c. during the same period, the growth of manufacturing production is indeed remarkable. Of this advance, the part resulting from an increase in the domestic demand due to growth

* For a much more detailed and comprehensive treatment of this subject, see the study "The Quantity of Manufacturing Production in Canada 1923-29" by A. Cohen, B. Com., Chief, General Manufactures Branch, Dominion Bureau of Statistics.

of population would be about 11·3 p.c. Exports of partly and fully manufactured goods increased from \$591,830,000 in the fiscal year ended Mar. 31, 1924, to \$690,904,000 in the fiscal year 1930, the increase in exports representing about 3·6 p.c. of the 1923 production. The remainder of the increase in production by 1929, or a margin equal to roughly 35 p.c. of the volume of manufactures of 1923, was, therefore, apparently absorbed by increases in capital equipment and by the rise in the standard of living of the population of Canada.

5.—Indexes of the Volume of Manufacturing Production, According to Component Material and Purpose Classifications, 1923, 1929, and 1932-35.

(1926=100.)

Classification and Group.	1923.	1929.	1932.	1933.	1934.	1935.
Component Material Classification—						
Vegetable products.....	78·3	121·6	92·5	90·9	103·3	108·6
Animal products.....	81·4	95·4	83·2	86·4	93·9	99·1
Textiles and textile products.....	84·0	113·6	98·5	107·1	118·1	124·8
Wood and paper products.....	83·4	127·5	87·2	89·3	104·5	115·0
Iron and its products.....	82·2	129·7	53·4	50·5	68·1	84·5
Non-ferrous metals.....	72·9	138·7	100·4	98·3	120·8	138·5
Non-metallic minerals.....	88·9	145·0	84·4	77·8	91·9	99·1
Chemicals and allied products.....	84·0	120·4	93·7	99·2	112·5	123·8
Miscellaneous industries.....	80·1	110·0	66·1	58·9	70·8	76·6
Totals, All Industries¹.....	81·8	122·9	81·9	82·0	96·5	106·5
Purpose Classification—						
Food.....	84·7	102·8	92·7	91·9	101·0	104·1
Clothing.....	82·9	114·8	93·2	97·9	105·1	110·5
Drink and tobacco.....	76·0	140·5	101·7	96·2	110·3	125·2
Personal utilities.....	85·4	101·9	70·6	71·0	79·8	87·9
House furnishings.....	78·9	137·7	89·9	87·3	100·5	109·2
Books and stationery.....	93·1	131·5	127·6	122·0	138·7	154·9
Producers materials.....	84·9	124·7	75·0	77·9	94·7	105·6
Industrial equipment.....	76·3	129·5	75·6	70·2	87·5	100·5
Vehicles and vessels.....	71·4	131·6	52·4	53·3	70·7	83·5
Miscellaneous.....	85·0	125·1	99·4	113·3	137·5	148·9

¹ Exclusive of central electric stations.

As may be seen from Table 5, all groups in the component material classification reported declines in the volume of production during the depression. In comparing the low point of the depression, *viz.*, 1933, with 1929 it is found that the iron and steel group suffered the greatest contraction in production with a decrease of 61·1 p.c. This was followed by the miscellaneous industries group, with a decrease of 46·5 p.c., non-metallic mineral products 46·3 p.c., wood and paper products 30·0 p.c., non-ferrous metal products 29·1 p.c., vegetable products 25·2 p.c., chemicals and allied products 17·6 p.c., animal products 9·4 p.c., and textiles and textile products 5·7 p.c.

In 1934 and 1935 there was a material improvement, the index of production for all industries rising from 82·0 in 1933 to 106·5 in 1935. In spite of this improvement only three groups—textiles, animal products, and chemicals—are above the 1929 level of production. The output of textiles in 1935 was about 10 p.c. greater than in 1929. This is an all-time record for this group of industries.

In analysing the changes in the volume of production, on a purpose classification basis, some interesting facts are revealed. In comparing 1933 with 1929 it is found that the food group reported a decrease of 10·6 p.c., while that of clothing decreased 14·7 p.c. The output of vehicles and vessels, which is largely made up of the automobile and rubber-tire industries, recorded a decrease of 59·5 p.c.—this is the greatest decrease of any group. Producers materials and industrial equipment declined 37·5 p.c. and 45·8 p.c., respectively, due to the general decline in industrial activity. House furnishings dropped 36·6 p.c., personal utilities 30·3 p.c., drink and tobacco 31·5 p.c., and books and stationery 7·2 p.c. The decrease

in the personal utilities group needs some explanation. The production of musical instruments, which is included in this group, has been decreasing steadily during the past few years, the output of pianos, phonographs and phonograph records becoming smaller and smaller. The main product of the musical instruments industry, namely, the radio, is now produced in the electrical apparatus industry. This industry, however, is credited to the industrial equipment group, as by far the largest part of its output consists of industrial equipment.

All groups shared in the improvement which occurred in 1934 and 1935. Only one of the major groups, *viz.*, "food", exceeded its 1929 production figure. The only other exceptions were two minor groups, "books and stationery" and "miscellaneous".

The index of the physical volume of production dropped from 122.9 in 1929 to 82.0 in 1933 and then rose to 106.5 in 1935, making a net decrease of 13.3 p.c. This decrease is significant when compared with a decrease of 31.3 p.c. in the net value of production and 20.1 p.c. in the number of wage-earners employed.

6.—Indexes of the Volume of Manufacturing Production for the Groups of the Purpose Classification, 1923, 1929, and 1932-35.

(1926=100.)

Group and Class.	1923.	1929.	1932.	1933.	1934.	1935.
Food	84.7	102.8	92.7	91.9	101.0	104.1
Breadstuffs.....	90.8	110.6	97.4	94.5	103.0	103.8
Fish.....	74.1	77.9	57.2	59.2	70.0	66.7
Fruit and vegetable preparations.....	59.3	127.5	109.4	116.2	137.3	147.6
Meats.....	90.1	97.3	90.6	94.4	106.5	107.0
Milk products.....	87.4	96.7	100.8	98.5	106.5	113.3
Oils and fats.....	111.5	87.8	101.9	89.9	101.9	119.9
Sugar.....	74.3	83.0	84.1	77.4	78.7	86.1
Infusions.....	97.0	112.9	114.8	124.2	136.3	142.6
Miscellaneous.....	82.9	120.2	111.6	118.7	132.2	150.4
Clothing	82.9	114.8	93.2	97.9	105.1	110.5
Boots and shoes.....	79.8	110.0	83.0	87.4	92.5	97.2
Fur goods.....	48.3	114.6	89.3	95.1	97.6	101.2
Garments and personal furnishings.....	90.6	113.3	87.8	96.5	107.9	115.7
Gloves and mittens.....	93.9	133.3	97.7	121.1	145.6	145.9
Hats and caps.....	67.1	109.2	87.0	85.1	100.6	107.9
Knitted goods.....	83.9	111.4	103.2	107.5	113.4	116.4
Waterproofs.....	78.4	143.8	107.9	105.2	112.1	140.5
Miscellaneous.....	97.7	138.0	128.1	120.4	118.4	122.4
Drink and Tobacco	76.0	140.5	101.7	96.2	110.3	125.2
Beverages, alcoholic.....	69.2	148.0	94.0	84.6	101.0	119.7
Beverages, non-alcoholic.....	86.0	146.8	137.4	131.5	143.4	155.9
Tobacco.....	81.3	133.3	108.8	113.4	121.9	129.3
Personal Utilities	85.4	101.9	70.6	71.0	79.8	87.9
Jewellery and timepieces.....	92.4	104.2	78.3	79.7	89.1	103.1
Recreational supplies.....	93.0	85.0	28.0	23.2	32.5	35.6
Personal utilities.....	78.6	111.7	104.1	109.3	116.6	127.0
House Furnishings	78.9	137.7	89.9	87.3	100.5	109.2
Books and Stationery	93.1	131.5	127.6	122.0	138.7	154.9
Producers Materials	84.9	124.7	75.0	77.9	94.7	105.6
Farm materials (fertilizers).....	78.3	130.8	381.1	505.8	609.1	675.3
Manufacturers materials.....	82.9	124.4	82.9	91.0	111.2	123.7
Building materials.....	88.0	123.1	54.1	47.3	57.7	65.4
General materials.....	95.4	133.4	79.2	76.8	88.0	96.0
Industrial Equipment	76.3	129.5	75.6	70.2	87.5	100.5
Farming equipment.....	66.8	98.9	25.4	20.6	41.2	59.0
Manufacturing equipment.....	86.2	131.4	65.0	58.2	79.5	101.8
Trading equipment.....	83.3	116.4	120.2	120.6	133.6	137.3
Service equipment.....	96.3	107.9	103.7	103.1	113.3	157.6
Light, heat and power equipment.....	66.2	149.0	100.3	87.7	106.7	122.8
General equipment.....	84.3	130.0	68.2	66.4	85.1	93.8
Vehicles and Vessels	71.4	131.6	52.4	53.3	70.7	83.5
Miscellaneous	85.0	125.1	99.4	113.3	137.5	148.6
Totals, All Manufactures ¹	81.8	122.9	81.9	82.0	96.5	106.5

¹ Exclusive of central electric stations.

The construction of this new index of the volume of manufacturing production has superseded, for 1923 and later years, the index published in 1931 and previous years. The former index, which made no pretence to the reliability of the new one, was made by dividing the gross value of manufactures by the index number of the prices of manufactured goods. The central electric stations were included in the former index, but are excluded from the new one. However, the former index covered the period 1917 to 1923 not covered in the new one and, since this earlier period was one of wide fluctuations in money values, the following index numbers are given for the whole period since 1917, using the earlier method, but excluding central electric stations, for the years 1917 to 1922, and the new index, transposed to the 1917 base, from 1923 to 1935.

INDEXES OF THE VOLUME OF MANUFACTURING PRODUCTION, 1917-35.

(1917=100.)

1917..... 100.0	1922..... 96.0	1927..... 136.5	1932..... 105.0
1918..... 102.0	1923..... 104.8	1928..... 148.8	1933..... 105.1
1919..... 98.1	1924..... 102.9	1929..... 157.5	1934..... 123.7
1920..... 95.0	1925..... 112.7	1930..... 142.8	1935..... 136.4
1921..... 86.1	1926..... 128.1	1931..... 124.1	

Consumption of Manufactured Products.—One of the beneficial results of placing the classification of external trade and of production upon a common basis is exhibited in Table 7, where the value of commodities made available for consumption in Canada is derived from the statistics of the two important fields. For example, the value of all manufactured commodities made available in a period approximately corresponding to 1935 was \$2,607,807,756, a figure obtained by adding to the value of manufactured products in 1935 the value of the imports of manufactured and partly manufactured goods during the fiscal year ended Mar. 31, 1936, and deducting the value of the corresponding exports for the same period. In this table more accurate statistics could be presented were it possible to exclude from the gross value of manufactured products the duplications involved when the products of one manufacturing establishment become the materials worked upon in another. Vegetable, iron, textile, animal, and wood and paper products were, in that order, the leading groups in the value of finished goods made available for consumption. The large amount of manufactured vegetable products made available for consumption was due to the large domestic production, as the exports and imports were about equal, while manufactures of textiles and iron and steel products, in addition to a large production, showed an excess of imports over exports of \$51,000,000 and \$56,000,000, respectively. Wood and paper, animal, and non-ferrous metal products were manufactured in Canada in greater quantities than required for home consumption, providing export balances in these groups.

In 1929, the order of the groups by the values available for consumption was iron, vegetable, textile, wood and paper, and animal products. In that year the value of iron products available for consumption represented 22.4 p.c. of the total for all products; in 1935 iron products represented only 17.1 p.c. of the total. Since 1929 the consumption of vegetable, animal, chemical, and textile products has been much better maintained than that of iron, non-metallic mineral, and wood products.

7.—Consumption of Manufactured Products, by Groups, 1935, with Totals for 1922-35.

NOTE.—Statistics of manufacturing production are for the calendar year. Imports and exports of manufactured and partly manufactured goods are for the fiscal years ended Mar. 31 of the following years.

Group of Industries.	Value of Products Manufactured.	Manufactured and Partly Manufactured Goods.		Value of Manufactured Products Available for Consumption. ¹
		Value of Net Imports.	Value of Domestic Exports.	
	\$	\$	\$	\$
Totals, 1922.....	2,482,209,130	574,551,323	515,173,415	2,541,587,038
Totals, 1923.....	2,781,165,514	639,343,645	591,823,306	2,828,679,853
Totals, 1924.....	2,695,053,582	576,031,243	591,598,479	2,679,486,346
Totals, 1925.....	2,948,545,315	671,462,940	695,325,245	2,924,683,010
Totals, 1926.....	3,221,269,231	767,022,008	673,709,266	3,314,581,973
Totals, 1927.....	3,394,713,270	825,147,919	648,178,000	3,571,683,189
Totals, 1928.....	3,738,484,728	954,468,018	702,314,797	3,990,637,949
Totals, 1929.....	4,029,371,340	939,226,894	690,904,225	4,277,694,009
Totals, 1930.....	3,428,970,628	675,919,565	494,561,750	3,610,328,443
Totals, 1931.....	2,698,461,862	423,610,230	350,166,608	2,771,905,484
Totals, 1932.....	2,126,194,555	281,928,859	269,423,169	2,138,700,245
Totals, 1933.....	2,086,847,847	298,135,224	367,873,223	2,017,109,848
Totals, 1934.....	2,533,758,954	357,388,394	422,113,451	2,469,033,897
Vegetable products.....	509,822,142	65,736,359	68,382,814	507,175,687
Animal products.....	351,643,587	13,495,715	56,506,222	308,633,080
Textiles and textile products.....	357,106,277	60,040,183	8,627,930	408,518,530
Wood and paper products.....	441,160,387	22,540,966	170,111,902	293,589,451
Iron and its products.....	390,228,929	108,958,126	52,358,206	446,828,849
Non-ferrous metal products.....	288,523,250	25,060,762	192,086,385	121,497,627
Non-metallic mineral products.....	176,184,717	30,657,563	7,996,581	198,845,699
Chemicals and allied products.....	118,574,228	29,505,079	16,018,391	132,060,916
Miscellaneous industries.....	36,978,953	29,602,288	9,952,710	56,628,551
Central electric stations.....	137,114,911	75,292	3,160,817	134,029,386
Totals, 1935.....	2,807,337,381	385,672,333	585,201,958	2,607,807,756

¹ For 1928 to 1935 foreign products imported and later re-exported are eliminated from the value of products available for consumption, but for 1927 and previous years this was impossible, since foreign exports for these years had never been analysed as raw materials or partly or fully manufactured goods. Therefore in this table the value of manufactured products made available for consumption, for the years 1922 to 1927, inclusive, is an overstatement by the amount of the foreign exports of manufactured goods in each year, probably varying from about \$11,000,000 in 1922 to \$18,000,000 in 1927.

Section 2.—Production of Industrial Groups and Individual Industries.

The manufacture of products of vegetable origin comprises the most important group of industries, the output in 1935 being valued at \$509,822,142 or 18·2 p.c. of the total value of production. Wood and paper products with an output valued at \$441,160,387 or 15·7 p.c. of the total ranked second, followed by iron and its products with \$390,228,929, textiles \$357,106,277, animal products \$351,643,587, non-ferrous metal products \$288,523,250, non-metallic mineral products \$176,184,717, central electric stations \$137,114,911, chemical products \$118,574,228, and miscellaneous industries \$36,978,953.

In employment, the importance of the groups is different. Under this category, the wood and paper group with 123,724 or 21·2 p.c. of the total employees occupies the premier position. Textiles with 120,699 or 20·7 p.c. of the total comes second, followed by iron and its products with 95,426, vegetable products 79,285, animal products 60,124, non-ferrous metal products 33,613, non-metallic mineral products 23,342, chemical products 18,933, central electric stations 15,458, and miscellaneous industries 12,270.

Analysis by Groups of Industries.—In spite of the improvement which took place during 1934 and 1935, the number of employees in 1935 is still 16·1 p.c. below the number employed in 1929, with a still greater decrease of 27·4 p.c. in salaries

and wages paid. This reflects the lower level of wages prevailing in 1935 as compared with 1929. Due to the drop in the wholesale prices of manufactured products, the value of production dropped 30.3 p.c. between 1929 and 1935 while the physical volume decreased only 13.3 p.c. The iron and its products group was hit hardest by the depression. In gross value of products, the output of these industries was reduced by 71.3 p.c. in 1933 compared with 1929. In salaries and wages paid the reduction was 62.8 p.c. and in employees 46.4 p.c. The wood and paper group and those of non-ferrous metals and animal products suffered severely, but not by any means as much as in the first group named. The records of central electric stations, the chemical and textile industries were particularly good; the first named showed the least reduction of all groups in gross value of production, but the chemicals showed the smallest reductions in both employees and salaries and wages paid. The miscellaneous group of industries showed a reduction of 72.7 p.c. in gross value of products, 50.8 p.c. in the number of employees and 64.5 p.c. in the salaries and wages paid. This group was not as severely affected as these figures would indicate, the bridge-building industry having been transferred from this group to that of iron and its products in 1930. On the other hand, the iron and its products group suffered more severely than is implied by the figures.

From the low year of the depression, so far as the manufacturing industries are concerned, *viz.*, 1933, while there has been marked improvement in all groups, iron and non-ferrous metal products have shown the greatest improvement in gross value of products and quite naturally central electric stations have shown the least. In number of employees and salaries and wages paid, iron and its products is also the leader. It is of interest to note that in the section of the table below, which compares 1935 data with those for 1929, as regards employees engaged, two industrial groups—chemicals and textiles—actually show increases. The miscellaneous group of industries and iron and its products have made the least headway towards the 1929 level, although the latter group has made a very marked advance from the low point of the depression.

8.—Percentage Variation in Employment, Salaries and Wages, and Gross Value of Products in the Manufacturing Industries in the Seven-Year Period 1929-35.

NOTE.—The highest pre-depression year was 1929, while the lowest depression year was 1933.

Group of Industries.	1933 Compared with 1929.			1935 Compared with 1929.			1935 Compared with 1933.		
	Em- ployees.	Salaries and Wages.	Gross Value of Pro- ducts.	Em- ployees.	Salaries and Wages.	Gross Value of Pro- ducts.	Em- ployees.	Salaries and Wages.	Gross Value of Pro- ducts.
Vegetable products.....	-17.7	-29.1	-43.2	-10.8	-19.8	-33.9	+ 8.5	+13.2	+20.9
Animal products.....	-26.2	-25.9	-45.0	-11.2	-13.0	-26.4	+13.2	+16.3	+29.7
Textiles and textile pro- ducts.....	-11.7	-21.8	-35.6	+ 4.4	- 8.8	-16.2	+13.6	+19.7	+21.2
Wood and paper products.	-36.0	-46.7	-52.9	-24.9	-33.3	-39.2	+17.3	+25.1	+28.9
Iron and its products ¹	-46.4	-62.8	-71.3	-27.9	-40.9	-47.1	+34.5	+58.9	+84.1
Non-ferrous metal pro- ducts.....	-33.0	-39.9	-46.4	-15.7	-26.0	+ 1.7	+33.0	+43.5	+75.1
Non-metallic mineral pro- ducts.....	-38.6	-47.8	-41.4	-25.7	-33.9	-27.2	+21.0	+26.5	+24.3
Chemicals and chemical products.....	- 7.8	-17.2	-33.0	+13.4	+ 4.7	-14.4	+23.0	+26.6	+27.7
Miscellaneous products ¹ ...	-50.8	-64.5	-72.7	-41.7	-57.8	-64.1	+18.4	+18.7	+31.2
Central electric stations...	-17.6	-21.5	- 6.8	- 4.4	- 9.3	+11.6	+ 5.0	+ 5.1	+16.7
Averages for All Industries.....	-28.9	-42.7	-48.2	-16.1	-27.4	-30.3	+18.0	+26.8	+34.5

¹ In 1930 bridge building, formerly included with miscellaneous products, was transferred to the iron and its products group.

Subsection 1.—Manufactures Grouped by Chief Component Materials.

A classification based on the chief component materials in the various products of each manufacturing establishment was applied for the first time in the compilation of the returns for 1920. The number of groups was reduced from fifteen to nine to correspond with the external trade classification and the classes of industry were somewhat altered to conform with recent industrial developments. Subsequently, the central electric stations industry was taken out of the miscellaneous class and now forms a class by itself.

Vegetable Products.—Though first in value of gross production in 1935, this group ranked only fourth in the number of people employed and in salaries and wages paid. With the exception of rubber, coffee and spices, sugar factories, and rice mills, the industries of this group are dependent mainly upon domestic farm products for their raw materials. They produced, in 1935, 18.2 p.c. of the total manufacturing production and employed 13.6 p.c. of all persons engaged in manufacturing industries.

The flour-milling industry is the leading industry of the group from the point of view of gross value of products. This industry, which has existed to meet the domestic needs for more than 300 years, is one of the Dominion's oldest manufactures, but it is only within recent times that its progress has become pronounced. The War and the demand it created gave a great impetus to this trade. The 384 flour-mills, many of them of the most modern type and highest efficiency, have a capacity far in excess of Canada's demands. During 1928, productive capacity reached about 121,000 barrels per day. Since then, the industry has suffered adversity. Exports of wheat flour declined from 10,737,266 barrels in 1928 to 4,881,057 barrels in 1935, but in spite of the decrease Canada continues to be one of the leading exporters of wheat flour.

With the increase in urban population, as well as the improvement in transportation, which increasingly enables rural communities to purchase factory-made bread, the bread industry made rapid strides during the past decade. During this period there was an increase of 30 p.c. in the capital invested and 54 p.c. in the number of employees. The bread and other bakery products industry had an output valued at \$59,400,668, capital investment reached \$43,788,924, employees numbered 19,167, and salaries and wages paid amounted to \$16,369,912. This industry was thus the third largest employer of labour among manufacturing industries. In salaries and wages paid, however, it ranked only eighth.

The rubber industry is another industry of importance in the industrial life of the country. Canada now ranks among the leading countries of the world as a manufacturer of rubber goods. In 1935 she was the seventh largest importer of raw rubber in the world, ranking after the United States, the United Kingdom, Japan, Germany, France, and Russia. Existing plants in 1935 numbered 45 and represented a capital investment of \$63,435,798, including equipment and working capital. These plants furnished employment to 11,023 persons who received \$11,017,431 in salaries and wages and produced goods valued at \$55,949,570. They also used raw materials to the value of \$20,258,774, mainly imported from tropical countries. The rubber industry is also of considerable importance to the cotton yarn and cloth industry, which supplies tire fabrics. The industry, besides supplying the domestic market, contributes materially to the export trade of Canada. The products find their way to the remotest parts of the world, as a glance at the list of countries to which rubber tires are shipped will show. Spain, Peru, Dutch East Indies, British East Africa, and China are but a few of these far-flung countries.

Establishments engaged in the production of tobacco, cigars and cigarettes numbered 116 in 1935. The capital invested in the industry amounted to \$58,178,513, employees numbered 8,145, salary and wage payments \$7,221,048, and the products made were valued at \$39,103,875 exclusive of excise taxes. Consumers of the products of this industry contributed about \$31,000,000 to the Dominion treasury in excise taxes. Canada is self-sufficient as regards its requirements of manufactured tobacco products. Practically the whole of the Canadian production goes to supply domestic demand, imports and exports of manufactured tobacco products being extremely small. The tobacco industry also contributes materially to the agricultural economy of Canada. Of the materials used, amounting to \$19,701,385, \$15,187,876 was for raw leaf tobacco. All told, the tobacco industry consumed 38,929,237 lb. of raw leaf tobacco of which 31,348,922 lb. was of domestic growth.

The fruit and vegetable preparations industry, which includes canned fruits, canned vegetables, pickles, vinegar, jams, etc., comprises another large division of this group. In 1935, this industry reported an output valued at \$38,276,487, a capital investment of \$38,272,379 and an employment of 7,912 persons, who received \$5,063,481 in salaries and wages. The development of the canned foods trade has effected great changes in the relation of foods to seasons. Fruits and vegetables of many kinds are to be had at all times of the year with much of their original freshness and flavour. The producers in the country are provided with an enormously extended market and the consumers in both city and country with cheap and wholesome food in great variety. The industry has made rapid strides in the past few years. During the period of 1923-35 the volume of fruit and vegetable preparations produced increased 155 p.c. This growth is indeed remarkable, as it represents a corresponding increase in the domestic demand for these products, the foreign trade being relatively small as compared with the domestic production. Imports in 1935 were valued at \$2,652,961 and exports at \$5,138,094. According to these figures, the industry has a small exportable surplus over domestic requirements.

Other important industries of this group are: biscuits and confectionery, brewing, distilling, and sugar refining.

Animal Products.—Production in this group is determined, in large measure, by the demand at home and abroad for Canadian butter, cheese, canned fish, fresh or frozen meats, bacon and hams, condensed and evaporated milk, etc.

The leading industry of the group is that of slaughtering and meat packing, with a value of production in 1935 of \$133,379,312. Next comes butter and cheese, with a value of \$99,888,971. These two industries represented about two-thirds of the production of the entire group.

The butter and cheese industry, which manufactures a product of farm animals, has been for many years of leading importance in Canada. Originating in the agricultural districts of the Maritime Provinces, the Eastern Townships of Quebec and the southern counties of Ontario, it is now developing rapidly in the Prairie Provinces and in the more recent northern settlements of Quebec and Ontario. For an industry so large in the aggregate, it is unique in having shown very little tendency toward consolidation in large units, the gross production of \$99,888,971 coming from no fewer than 2,589 plants, mostly small and scattered at convenient points throughout the farming communities.

The leather industries have long been established on a considerable scale, mainly, of course, because the large number of cattle raised and slaughtered provide a ready supply of hides. There are large tanneries in the eastern provinces and no fewer than 217 boot and shoe factories were in operation in 1935, chiefly in Quebec and Ontario, representing a total capital of about \$24,000,000 with an annual output of over \$36,000,000 and employing 15,930 men and women. The canning and preserving of fish also calls for reference. Concentrated naturally upon the Pacific and Atlantic coasts, 630 establishments were engaged in 1935 in canning, curing and packing of various kinds of fish that were valued at \$23,000,000.

Textile Products.—The output of textiles in 1935 was valued at \$357,106,277. The establishments in this group, which numbered 2,275, represented a capital investment of \$329,197,254; they furnished employment to 120,699 persons who were paid \$96,574,954 in salaries and wages, and also spent \$183,920,438 for materials.

In net production, *i.e.*, in value added by manufacture, which is a truer criterion than gross production of the place of the group in the industrial life of the country, the textile group was fourth in 1935 among the ten major groups shown in the summary statistics of Table 3, p. 407, being exceeded only by the wood, vegetable, and iron and its products groups. Textiles accounted for about 13 p.c. of the net manufacturing production of Canada. As an indication of the contribution which the textile group made in 1935 to the employment in the Dominion, the group stood second in the number of employees and third in salaries and wages paid, with about 21 p.c. of the total employees in manufacturing and 16 p.c. of the total salaries and wages paid. Again, this wide group of textiles may be regarded as two distinct divisions: (1) the spinning, weaving and knitting trades, and (2) the finishing trades. If so regarded, the first division assumes the proportions of a very large industrial group with a gross production of \$185,486,029, while the second division, which usually is the larger, had a production of only \$171,620,248 in 1935.

From the standpoint of gross value of production, cotton yarn and cloth in 1935 was again the leading industry in the textile group. The output was valued at \$59,378,664 while the persons employed numbered 18,121 and the salaries and wages paid totalled \$13,206,265.

The hosiery and knitted goods industry is also worthy of special mention. From the standpoint of employment and salaries and wages paid, it was first in 1935, employing 18,511 persons and paying \$14,252,653 in salaries and wages. Despite the depressed condition of the textile industry generally, the volume and value of production of this branch of the industry held up remarkably well, the value of production being only 23·2 p.c. lower than the peak year of 1929 while the volume was actually 4·5 p.c. higher. Employment, however, declined by 537 or 2·8 p.c. since 1929.

The outstanding feature of the textile situation in Canada has been the great expansion of the silk industry during the past few years, at a time when practically all other industries were experiencing a diminishing demand for their products. While other industries have to struggle hard to regain the 1929 level of production, this industry has since then recorded an increase of 24 p.c. in capital investment, 131 p.c. in number of employees, 119 p.c. in salary and wage payments, 80 p.c. in cost of materials and 93 p.c. in gross value of production.

Wood and Paper.—The forests of Canada have always been an important factor in the building up and maintaining of manufacturing industries. Since early pioneering times the sawmill has formed one of the first steps from the pioneering

community to the industrial centre. There is to-day practically no form of industrial activity in which wood is not used, directly as a raw material or indirectly as, for example, in the form of paper. The primary operations in the woods provide work during part of the year for at least 200,000 individuals, largely during the season when employment in manufacturing industries is at its minimum. This has a valuable steadying effect on general labour conditions throughout the year.

The manufacture of lumber, which depends to a large extent on building and construction operations and the export markets, has shown wide fluctuations. The peak, reached in 1911 with a total cut of 4,918,000 M ft. b.m., has never been equalled. It was followed by a general decline to the 2,869,000 M reported for 1921. A second peak of 4,742,000 M was reached in 1929. Production then decreased annually to a minimum in 1932 amounting to 1,810,000 M. There were increases in 1933, 1934, and 1935.

The manufacturing industries that draw their principal raw material from the sawmills reached their maximum production in 1929 with a gross value of \$146,950,000 and then declined to \$52,289,642 in 1933 but increased to \$57,860,721 in 1934 and to \$64,802,326 in 1935.

The pulp and paper industry is a comparatively recent development in Canadian industry. In 1881 there were only 36 paper and 5 pulp mills in operation in Canada. By 1923 the industry had displaced flour milling as Canada's most important manufacturing industry and in spite of recent vicissitudes has held that position up to 1935, when it was displaced by the non-ferrous metal smelting and refining industry. In employment and salaries and wages paid, pulp and paper is still, however, the dominant industry. The peak of production was reached in 1929 when 4,021,000 tons of wood pulp and 3,197,000 tons of paper were produced. In that year there were 108 pulp and paper mills in operation, consuming 5,278,000 cords of pulpwood and using hydro-electric power valued at more than \$13,000,000. During 1926, Canada, for the first time, produced more newsprint than the United States and has maintained the leadership in spite of decreases in production. During 1935 this industry produced 3,868,341 tons of pulp, the highest production since 1929, and 3,280,896 tons of paper, an all-time record. Of this paper, 2,765,444 tons was newsprint, more than three times the production of the United States.

The manufacturing industries which draw their principal raw material from the pulp and paper mills reached their maximum production of \$187,882,000 in 1929. In 1934 production was \$139,108,400 and in 1935, \$147,801,647.

Iron and Its Products.—The manufacture of iron and steel and their products is one of Canada's basic industries. In 1935 over half a billion dollars was invested in the 1,249 establishments in this line of business, 95,000 persons were given employment and the payroll amounted to \$110,000,000. Gross production was valued at \$390,000,000, a figure which was just a little more than half of the value reported for 1929.

Although ore for the manufacture of iron has not been mined in Canada for some years, there exists a primary industry of considerable size. There are now four concerns which make pig iron, one being in Nova Scotia and three in Ontario. The former company uses Nova Scotia coal and iron ore from the great Wabana deposits, which it controls, on Bell island, Newfoundland. The other concerns import ore and coal from the United States. These companies have 10 blast furnaces available for use which, if operated at capacity, could produce 1,500,000 long tons of pig iron annually. They also operate open-hearth steel furnaces and

rolling mills to make steel ingots, blooms and billets, merchant and alloy steel bars, rails, structural shapes, plates, sheets, rail fastenings, etc. Including a number of other steel furnaces and rolling mills there were 30 steel-making plants in operation in 1935 and 13 rolling mills. Factory sales of pig iron, steel, ferro-alloys, and rolled products were valued at \$39,000,000.

Among the secondary or fabricating industries the manufacture of automobiles takes first place. It is one of Canada's largest industries. In 1935 there were 20 manufacturing or assembling plants in operation, employees numbered 13,095 and products advanced \$30,000,000 in value to \$106,624,445. The number of cars and trucks made was 172,877 of which about 40 p.c., or 69,348, were for export. The 1935 production was the highest since 1929 when 262,625 cars were made in Canada. The making of automobile parts occupied 82 establishments and 6,614 employees in 1935 and production was valued at \$32,684,252, an advance of \$8,000,000.

All other industries in the group showed gains, the value of output in the railway rolling-stock industry advancing to \$41,200,000 from \$34,300,000; the machinery industry to \$32,800,000 from \$26,000,000; the farm implements industry to \$13,700,000 from \$8,800,000; the castings and forgings industry to \$38,800,000 from \$35,100,000; bridge and structural steel industry to \$7,600,000 from \$4,700,000; sheet metal products industry to \$33,600,000 from \$30,900,000; the hardware and tools industry to \$16,000,000 from \$13,600,000; wire and wire products to \$16,200,000 from \$14,700,000; the increases in the other groups, including the boilers, tanks and engines industry, the bicycle industry, and the miscellaneous iron and steel industry, being less than one million dollars in each case.

Non-Ferrous Metals.—Production during 1935 from this group of manufactures based on non-ferrous metals was valued at \$288,523,250 compared with \$237,233,670 in 1934 and \$283,545,666 in 1929, previously the best year on record.

A total of 505 factories were in operation in this group in 1935 as against 487 in 1934, but the capital employed declined \$1,900,000 to \$261,625,967. The number of persons employed increased to 33,613 from 30,177 in 1934 and salaries and wages advanced to \$40,315,477 from \$35,097,986. The cost of materials and supplies used during 1935 was \$174,906,971 as against \$119,713,328 in 1934 and the cost of fuel and electricity advanced to \$5,717,809 from \$5,364,840.

For purposes of the annual Census of Manufactures the makers of non-ferrous metal products have been classified under 7 main industries in accordance with the nature of their main products. All but one of these industries reported a gain in output value in 1935 compared with 1934. In the non-ferrous smelting and refining industry the gain was \$36,000,000, or 24 p.c., to \$186,245,658; electrical apparatus increased \$11,000,000, or 22 p.c., to \$61,152,834; white metal alloys gained 18 p.c. to \$6,182,402; aluminium products gained 33 p.c. to \$4,992,640; and the miscellaneous industry increased 27 p.c. to \$1,170,035. The brass and copper products industry showed a slight decline in output value to \$19,187,022.

Non-Metallic Minerals.—This group of manufactures includes such leading industries as coke making, oil refining, and the manufacture of glass, artificial abrasives, bricks, cement, etc. Final figures for 1935 show that the output for this group amounted in value to \$176,184,717 which is 6 p.c. above the corresponding total for 1934 but 27 p.c. below 1929.

The petroleum refining industry is by far the largest of the group. Canada produces some crude oil, but the bulk of the oil treated in Canadian refineries is imported from the United States or South America. In 1935 there were 45 refineries

operating at advantageous points across the Dominion; these units used 1,196,411,-443 gallons of crude oil and produced refined commodities worth \$79,176,081. About 4,800 people were employed and capital invested was \$64,012,045.

Forty-four coke and gas plants, representing an investment of \$99,000,000, made products worth \$38,474,789. Aerated waters, glass, cement, lime, salt, brick, dressed stone, cement products, and asbestos goods were also made in this group.

Chemicals and Allied Products.—Production of chemicals and allied products in 1935 was valued at \$118,574,228 at factory prices. This total, which was higher than in any year since 1930, was about 9.7 p.c. above the 1934 value of \$108,052,039 and 27.7 p.c. above the corresponding figure of \$92,820,761 in 1933. The gain in employment over 1934 was 10.5 p.c. and salaries and wages increased 13.3 p.c.

The improvement in 1935 was quite general with 13 of the industries showing substantial advances and one reporting a small decline. The gains were as follows: coal tar distillation, 30 p.c. to \$2,606,338; acids, alkalies, and salts, 15 p.c. to \$19,012,615; compressed gases, 9 p.c. to \$3,077,765; fertilizers, 11 p.c. to \$6,075,616; medicinals, 9 p.c. to \$21,292,751; paints, 9 p.c. to \$20,341,407; soaps, 17 p.c. to \$16,002,048; toilet preparations, 0.6 p.c. to \$6,017,944; inks, 19 p.c. to \$2,886,853; wood distillation, 4 p.c. to \$805,756; adhesives, 9 p.c. to \$1,436,259; polishes, 11 p.c. to \$2,149,239, and the miscellaneous industry, 2 p.c. to \$8,332,123. The value of explosives, etc., at \$8,537,514 was 6 p.c. less than in 1934.

The number of operating establishments in 1935 was 734 compared with 736 in 1934; the number of employees rose to 18,933 from 17,130, and salaries and wages increased \$2,700,000 to \$23,715,305. Capital employed was slightly less in 1935 at \$147,472,534.

About 52 p.c. of the factories, or 387, were located in the province of Ontario; their production totalled \$69,304,933, or 58 p.c. of the Canada total and their employees numbered 9,912, or 52 p.c. of the total. Quebec's 219 establishments gave work to 6,806 persons and made products worth \$34,767,941.

Many chemical products are also made in industries which, for statistical purposes, are not included in the chemicals and allied products group. For instance, pulp and paper, distilled liquors, brewery products, and artificial abrasives are classified in other groups.

Central Electric Stations.—The generation of power by central electric stations, which is of such vital importance to the development of manufactures in Canada, has increased very rapidly since the Great War. The output in 1919, the first year for which statistics have been compiled, amounted to 5,500,000,000 kilowatt hours and by 1930 had grown to 18,000,000,000 kilowatt hours. In spite of a temporary set-back occasioned by the general contraction in industrial production, the output for 1935 reached a new high record of 23,300,000,000 kilowatt hours. The pulp and paper industry is the largest user of electric energy. During 1935, this industry purchased 9,400,000,000 kilowatt hours from central electric stations, or about 40 p.c. of the total output. Other large users of electric energy are: the primary iron and steel industry, non-ferrous metal smelting, and acids, alkalies, and salts establishments. Approximately 8 p.c. of the total output of central electric stations in 1935 was used for residence lighting and other domestic services, while 6 p.c. was exported to the United States.

The growth of central electric stations is also strikingly illustrated in the increase since 1919 of 250 p.c. in the capital investment, which in 1935 totalled \$1,459,821,168 or 31 p.c. of the total for all industries. This industry is also unique in that there are no expenditures for raw material.

9.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Power, Fuel,

	Province, Group or Kind of Industry.	Establish- ments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
		No.	\$	No.	No.	\$
Totals, by Provinces.....		25,491	4,698,991,853	82,041	23,538	173,020,195
1 Prince Edward Island.....	261	3,508,905	221	39	212,764	
2 Nova Scotia.....	1,350	118,999,064	1,939	492	3,266,082	
3 New Brunswick.....	872	115,635,568	1,691	410	3,114,008	
4 Quebec.....	7,942	1,664,198,107	24,246	6,410	50,472,339	
5 Ontario.....	10,266	2,064,194,151	40,649	13,340	91,500,724	
6 Manitoba.....	1,099	198,822,314	3,826	931	7,357,184	
7 Saskatchewan.....	880	66,271,171	1,756	313	2,635,015	
8 Alberta.....	1,002	96,322,781	2,383	449	4,028,651	
9 British Columbia and Yukon.....	1,819	371,039,792	5,330	1,154	10,433,428	
Totals, by Groups.....		25,491	4,698,991,853	82,041	23,538	173,020,195
1 Vegetable products.....	5,402	496,256,485	12,778	3,311	25,375,328	
2 Animal products.....	4,402	211,672,508	8,378	2,044	14,590,298	
3 Textiles and textile products.....	2,275	329,197,254	8,927	4,178	21,424,283	
4 Wood and paper products.....	8,186	873,756,949	20,026	4,866	39,042,919	
5 Iron and its products.....	1,249	555,144,467	10,964	2,854	24,855,596	
6 Non-ferrous metal products.....	505	261,625,967	5,137	1,657	12,490,118	
7 Non-metallic mineral products.....	1,188	300,455,725	4,045	885	8,176,057	
8 Chemicals and chemical products.....	734	147,472,534	4,989	1,879	12,336,856	
9 Miscellaneous industries.....	509	63,588,796	1,847	574	4,019,872	
10 Central electric stations.....	1,041	1,459,821,168	4,950	1,290	10,708,868	
1.—Vegetable Products.....	5,402	496,256,485	12,778	3,311	25,375,328	
1 Biscuits, confectionery, cocoa, etc.....	234	37,779,319	1,798	480	3,889,159	
2 Bread and other bakery products.....	3,045	43,788,924	2,260	564	2,866,264	
3 Breweries.....	73	57,928,298	917	126	2,266,507	
4 Coffee, tea, and spices.....	86	13,431,195	595	173	1,392,881	
5 Distilleries.....	16	42,045,051	285	80	924,517	
6 Flour and feed mills.....	1,127	56,475,315	1,569	181	2,094,324	
7 Foods, breakfast.....	23	5,119,820	79	36	202,640	
8 Foods, stock and poultry.....	99	4,166,324	247	74	441,332	
9 Foods, miscellaneous.....	106	9,581,719	484	175	1,049,730	
10 Fruit and vegetable preparations.....	298	38,272,379	748	236	1,423,060	
11 Ice cream cones.....	8	609,081	8	4	18,484	
12 Linseed and soya bean oil.....	8	2,228,003	31	6	83,134	
13 Macaroni, vermicelli, etc.....	15	1,985,716	62	17	106,770	
14 Malt and malt products.....	12	6,844,694	66	8	188,846	
15 Rice mills.....	6	940,365	16	2	45,945	
16 Rubber goods, including footwear.....	45	63,435,798	1,299	416	2,947,122	
17 Starch and glucose.....	6	7,573,998	94	37	292,897	
18 Sugar refineries.....	8	33,017,874	333	55	1,078,256	
19 Tobacco, cigars and cigarettes.....	116	58,178,513	1,602	602	3,479,509	
20 Tobacco processing and packing.....	21	5,517,516	127	11	270,289	
21 Wine.....	50	7,336,583	158	28	313,662	
2.—Animal Products.....	4,402	211,672,508	8,378	2,044	14,590,298	
1 Animal oils and fats.....	4	112,677	4	1	7,999	
2 Belting, leather.....	13	844,442	44	16	101,782	
3 Boot and shoe findings, leather.....	18	1,283,396	49	8	100,281	
4 Boots and shoes, leather.....	217	24,313,445	1,085	428	2,481,228	
5 Butter and cheese.....	2,589	58,291,763	2,850	726	3,495,689	
6 Condensed milk.....	21	4,912,936	95	32	217,511	
7 Dairy products, other.....	36	2,714,884	80	23	162,072	
8 Fish curing and packing.....	630	17,144,806	475	75	703,075	
9 Fur dressing and dyeing.....	13	957,872	70	11	167,210	
10 Fur goods.....	309	10,474,936	544	156	1,030,514	
11 Gloves and mittens, leather.....	46	2,471,700	137	40	246,139	
12 Hair goods, animal and human.....	5	84,222	6	3	5,786	
13 Leather tanneries.....	85	22,982,210	296	69	861,893	
14 Miscellaneous leather goods.....	218	5,728,593	421	124	613,415	
15 Sausage and sausage casings.....	59	1,146,911	68	15	130,529	
16 Slaughtering and meat packing.....	139	58,207,715	2,154	317	4,265,175	
3.—Textiles and Textile Products.....	2,275	329,197,254	8,927	4,178	21,424,283	
1 Awnings, tents and sails.....	66	1,732,394	126	34	187,466	
2 Bags, cotton and jute.....	24	5,221,593	106	36	304,480	
3 Bating and wadding.....	5	1,231,907	17	6	63,578	
4 Carpets, mats and rugs.....	24	6,768,069	153	47	355,528	
5 Clothing, factory, men's.....	170	16,271,865	1,250	385	2,272,203	

Materials, and Values of Products of Canadian Manufacturing Industries, 1935.

Employees on Wages.			Power Installed.	Cost of Fuel and Electricity.	Cost of Materials.	Value of Products.	
Male.	Female.	Wages.				Net. ¹	Gross.
No.	No.	\$	h.p.	\$	\$	\$	\$
366,778	110,517	417,306,709	8,783,055 ²	84,273,129	1,420,885,153	1,302,179,099	2,807,337,381
592	256	405,642	9,034 ²	99,192	1,894,409	1,362,405	3,356,006
11,346	2,283	10,776,592	269,260 ²	4,466,242	31,647,800	30,995,130	67,109,172
9,840	1,996	8,566,087	235,933 ²	3,149,453	25,551,371	27,643,366	56,344,190
112,034	46,981	122,882,246	3,893,944 ²	28,648,403	398,566,702	393,805,691	821,020,796
176,789	50,660	212,306,483	2,681,257 ²	36,072,924	718,570,816	668,918,734	1,423,562,474
15,090	3,392	17,343,882	493,397 ²	2,455,218	67,929,760	47,349,314	117,734,292
3,912	374	3,889,396	154,288 ²	1,798,232	28,046,921	16,976,149	46,821,302
8,100	1,155	8,475,798	180,067 ²	1,518,754	42,831,636	28,932,217	73,282,607
29,075	3,420	32,660,583	865,875 ²	6,064,711	105,845,738	86,196,093	198,106,542
366,778	110,517	417,306,709	11,657,748 ³	84,273,129	1,420,885,153	1,302,179,099	2,807,337,381
43,974	19,222	49,484,119	331,361 ³	9,088,743	283,681,945	217,051,454	509,822,142
39,121	10,581	39,444,836	122,560 ³	4,634,745	247,375,247	99,633,595	351,643,587
48,410	59,184	75,150,671	240,549 ³	6,957,306	183,920,438	166,228,533	357,106,277
89,513	9,319	89,153,605	2,160,083 ³	26,732,479	175,040,681	239,387,227	441,160,387
78,623	2,985	85,546,770	660,491 ³	12,612,506	203,981,458	173,634,965	390,228,929
22,781	4,038	27,825,359	416,927 ³	5,717,809	174,906,971	107,898,470	288,523,250
17,868	544	19,249,167	222,555 ³	11,368,432	88,969,870	75,846,415	176,184,717
9,311	2,754	11,378,449	130,464 ³	4,256,062	48,316,876	66,001,290	118,574,228
7,959	1,890	8,262,608	61,785 ³	850,171	14,691,667	21,437,115	36,978,953
9,218	Nil	11,811,125	7,310,973 ³	2,054,876	Nil	135,060,035	137,114,911
43,974	19,222	49,484,119	331,361	9,088,743	283,681,945	217,051,454	509,822,142
3,666	4,502	5,426,404	21,121	700,216	19,231,189	21,266,428	41,197,833
14,382	1,961	13,503,648	15,684	1,915,706	28,343,545	29,141,417	59,400,668
1,381	86	3,889,135	23,453	708,038	15,024,625	24,966,377	40,699,404
788	562	1,144,196	3,366	102,706	17,543,308	6,568,747	24,214,761
800	415	988,754	8,981	312,418	3,014,348	12,787,595	16,114,361
3,561	143	3,071,183	119,297	1,356,769	78,071,667	18,139,432	97,567,868
348	179	543,997	4,459	181,959	3,304,705	6,168,385	9,655,407
444	16	396,213	6,982	88,839	4,734,559	1,808,573	6,631,971
645	439	883,112	5,724	179,681	7,556,381	6,903,561	14,639,623
3,253	3,675	3,640,421	16,899	576,801	22,252,826	15,446,860	38,276,487
37	13	34,817	63	15,028	98,296	168,288	281,612
157	-	152,213	2,044	53,155	2,365,776	649,845	3,068,776
146	105	145,846	1,752	43,791	885,246	559,913	1,488,950
222	1	312,958	5,500	262,212	4,080,321	2,622,525	6,965,058
60	-	63,617	612	4,147	1,137,836	355,965	1,497,948
6,684	2,624	8,070,309	64,962	1,189,014	20,258,774	34,501,782	55,949,570
461	17	462,394	4,520	185,109	2,635,566	2,262,019	5,082,694
1,654	92	2,008,435	21,368	964,177	25,137,568	10,496,252	36,597,997
2,113	3,828	3,741,539	2,935	157,784	19,701,385	19,244,706	39,103,875
762	589	671,913	403	43,104	6,807,056	1,385,603	8,235,763
410	25	333,015	1,236	48,089	1,496,968	1,607,181	3,152,238
39,121	10,581	39,444,836	122,560	4,634,745	247,375,247	99,633,595	351,643,587
20	Nil	19,790	85	5,894	66,469	67,256	139,619
89	Nil	75,891	343	9,846	370,941	306,527	687,314
365	67	289,606	2,877	47,500	601,770	672,763	1,322,033
8,946	5,471	9,261,643	6,484	281,429	19,431,799	16,276,684	35,989,912
10,861	349	10,409,446	40,789	1,642,140	69,953,193	28,293,638	99,888,971
552	28	586,727	3,672	321,752	5,281,904	2,538,528	8,142,184
236	23	270,983	1,934	45,965	807,468	1,267,780	2,121,213
3,185	1,031	2,171,478	11,590	344,971	14,772,722	8,340,663	23,458,356
608	119	564,126	893	30,033	319,589	1,025,125	1,874,747
1,227	99	2,036,063	495	65,044	7,844,084	4,609,542	12,518,670
652	905	940,081	320	22,833	1,905,581	1,758,688	3,687,102
13	3	11,320	80	1,592	42,733	31,555	75,880
3,486	116	3,058,213	15,507	499,626	12,991,558	7,006,369	20,497,553
1,303	574	1,341,798	1,568	57,791	3,554,285	2,832,550	6,444,626
259	22	224,499	469	31,149	1,239,341	645,605	1,916,095
7,319	884	8,183,172	35,454	1,227,180	108,191,810	23,960,322	133,379,312
48,410	59,184	75,150,671	240,549	6,957,306	183,920,438	166,228,533	357,106,277
190	156	270,766	248	13,676	868,429	723,206	1,605,311
303	479	567,647	1,199	40,272	6,557,653	1,806,182	8,404,107
106	16	113,231	637	17,104	489,855	382,705	889,664
568	308	681,168	2,125	105,453	1,430,894	1,853,652	3,389,999
3,901	3,760	6,718,167	1,615	132,499	20,676,934	15,769,464	36,578,897

¹ See footnote 1 to Table 1, p. 405.² Exclusive of purchased power.³ Including purchased power.

9.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Power, Fuel,

	Group or Kind of Industry.	Establishments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
		No.	\$	No.	No.	\$
3.—Textiles or Textile Products—concl.						
6	Clothing, factory, women's.....	591	22,668,528	1,672	889	3,892,895
7	Clothing, contractors, men's and women's.	113	671,967	223	45	293,475
8	Cordage, rope and twine.....	11	10,991,086	77	24	247,566
9	Corsets.....	22	3,318,490	159	210	524,756
10	Cotton and wool waste.....	17	840,796	34	17	92,324
11	Cotton textiles, <i>n.e.s.</i>	44	2,283,660	107	44	238,534
12	Cotton thread.....	5	2,804,903	76	26	173,482
13	Cotton yarn and cloth.....	35	70,741,613	423	144	1,163,749
14	Dyeing and finishing of textiles.....	23	5,257,029	115	37	321,088
15	Dyeing, cleaning and laundry work.....	416	22,767,558	878	531	1,856,247
16	Flax, dressed.....	9	129,593	3	Nil	2,600
17	Furnishing goods, men's.....	176	15,569,465	642	316	1,586,914
18	Gloves and mittens, fabric.....	8	564,990	13	7	36,624
19	Hats and caps.....	169	6,451,000	443	193	960,186
20	Hosiery and knitted goods.....	163	50,048,900	921	578	2,710,446
21	Miscellaneous textiles, <i>n.e.s.</i>	10	11,342,949	276	61	753,998
22	Oiled and waterproof clothing.....	15	759,872	24	11	65,387
23	Silk and artificial silk.....	33	35,063,023	593	311	1,653,933
24	Woollen cloth.....	65	19,620,649	361	126	982,624
25	Woollen goods, <i>n.e.s.</i>	25	7,114,557	88	28	315,469
26	Woollen yarn.....	34	8,734,643	137	69	328,089
27	All other industries.....	2	226,155	10	3	35,722
4.—Wood and Paper Products.....						
		8,186	873,756,949	20,026	4,866	39,042,919
1	Beekeepers' and poultrymen's supplies.....	7	184,596	15	2	17,973
2	Blue printing.....	20	229,845	24	5	40,953
3	Boat building.....	125	1,903,735	171	12	156,267
4	Boxes and bags, paper.....	146	21,153,422	705	258	1,973,139
5	Boxes, wooden.....	129	6,961,712	294	42	489,339
6	Carriages, wagons, and sleighs.....	187	1,622,902	206	5	138,596
7	Charcoal.....	71	161,157	74	Nil	10,952
8	Coffins and caskets.....	44	3,973,184	125	28	240,332
9	Cooperage.....	80	1,920,016	95	6	126,225
10	Engraving, stereotyping and electrotyping.....	91	9,619,782	525	149	1,238,104
11	Excelsior.....	11	307,586	19	5	15,558
12	Flooring, hardwood.....	22	3,330,276	101	19	190,582
13	Furniture.....	404	26,060,887	1,076	244	1,789,353
14	Lasts, trees, and shoe findings.....	13	1,144,722	44	16	166,501
15	Lithographing.....	42	10,568,785	386	174	1,305,189
16	Miscellaneous paper products.....	102	13,218,342	413	207	1,167,354
17	Miscellaneous wooden products.....	93	4,608,846	150	42	288,323
18	Planing mills, sash and door factories.....	659	28,917,294	1,144	177	1,547,163
19	Printing and bookbinding.....	1,182	40,331,944	2,595	699	5,162,026
20	Printing and publishing.....	793	53,721,846	5,798	1,914	11,363,513
21	Pulp and paper.....	95	545,572,938	2,791	499	7,827,961
22	Refrigerators.....	9	499,733	31	8	50,325
23	Roofing paper, wallboard, etc.....	14	4,884,394	226	52	461,635
24	Sawmills.....	3,698	75,973,627	2,622	190	2,250,109
25	Sporting goods.....	37	1,528,278	87	37	154,241
26	Trade composition.....	32	1,017,257	59	16	149,503
27	Woodenware.....	22	1,239,806	50	10	114,201
28	Wood turning.....	38	1,730,708	82	13	122,904
29	All other industries.....	20	11,369,329	118	37	479,598
5.—Iron and Its Products.....						
		1,249	555,144,467	10,964	2,854	24,855,596
1	Agricultural implements.....	34	55,528,865	647	183	1,323,053
2	Automobiles.....	20	40,765,548	1,459	471	4,046,338
3	Automobile supplies.....	82	23,260,333	548	237	1,400,411
4	Bicycles and skates.....	4	2,000,548	25	10	39,350
5	Boilers, tanks and engines.....	56	15,417,364	443	89	897,149
6	Bridge and structural steel work.....	18	18,935,273	564	66	1,223,234
7	Castings and forgings.....	303	63,585,479	1,476	412	3,363,053
8	Hardware and tools.....	133	25,292,218	520	249	1,365,170
9	Iron and steel products, <i>n.e.s.</i>	98	5,731,305	299	53	518,465
10	Machinery.....	211	59,899,705	1,656	487	3,658,097
11	Primary iron and steel.....	53	86,465,490	706	125	1,441,393
12	Railway rolling-stock.....	37	86,547,010	1,228	68	2,529,387
13	Sheet metal products.....	129	47,369,004	998	283	2,101,001
14	Wire and wire goods.....	71	24,346,325	395	121	949,495

Materials, and Values of Products of Canadian Manufacturing Industries, 1935—con.

Employees on Wages.			Power Installed.	Cost of Fuel and Electricity.	Cost of Materials.	Value of Products.	
Male.	Female.	Wages.				Net. ¹	Gross.
No.	No.	\$	h.p.	\$	\$	\$	\$
4,311	11,022	10,700,966	4,009	214,492	31,642,215	21,939,567	53,796,274
835	1,364	1,259,334	418	34,933	127,480	1,756,162	1,918,575
618	282	774,698	7,610	107,646	2,628,585	2,390,856	5,127,087
147	1,091	709,712	595	18,942	1,970,414	2,368,006	4,357,362
156	91	158,478	1,813	33,486	1,170,112	637,604	1,841,202
301	536	526,438	1,005	30,541	1,707,133	1,894,968	3,132,642
181	413	459,082	1,895	64,008	1,558,525	2,052,644	3,675,177
11,294	6,260	12,042,516	110,656	1,876,331	33,689,873	23,812,460	59,378,664
699	146	687,512	4,055	241,801	1,560,868	2,202,065	4,004,734
3,770	5,573	6,482,887	15,287	938,365	1,738,936	13,633,960	16,311,261
62	Nil	14,349	410	2,203	41,744	81,002	124,940
1,141	6,858	4,201,341	4,932	140,662	13,916,201	9,095,917	23,152,780
42	194	118,228	357	7,457	309,024	222,970	539,451
1,744	1,831	2,699,095	1,609	122,418	5,549,013	5,853,047	11,524,478
6,038	10,974	11,542,207	19,622	753,400	22,948,056	22,688,647	46,390,103
858	177	914,808	8,228	203,209	3,610,691	4,093,372	7,907,272
111	151	193,063	171	10,507	664,227	415,353	1,090,037
5,551	3,633	6,717,084	21,118	931,738	10,946,739	16,166,863	28,045,340
3,482	2,336	4,126,079	15,700	598,399	10,342,336	8,402,570	19,343,305
788	248	839,935	8,750	114,834	2,605,343	2,805,564	5,525,741
1,174	1,246	1,581,079	6,363	198,357	4,986,518	3,462,866	8,647,741
39	39	50,801	122	4,573	182,640	216,861	404,074
89,513	9,319	89,153,605	2,160,083	26,732,479	175,040,681	239,387,227	441,160,387
28	Nil	17,902	258	2,356	49,069	87,235	138,660
56	5	37,923	124	5,400	49,857	123,211	178,468
407	3	280,370	1,730	19,307	373,406	631,737	1,024,450
2,461	2,138	3,453,921	7,241	235,430	12,952,362	10,278,576	23,466,368
2,333	228	1,452,418	13,886	108,961	2,613,538	2,976,720	5,699,219
266	1	209,479	1,816	33,511	276,901	535,893	846,305
20	Nil	10,940	94	394	23,948	26,319	50,661
568	110	526,466	1,615	40,947	836,153	1,393,861	2,270,961
456	1	328,022	2,151	24,053	1,063,761	758,539	1,846,353
1,366	393	2,438,700	2,932	111,032	1,191,562	5,417,273	6,719,807
63	12	40,500	874	7,671	69,433	94,800	171,904
613	4	413,252	5,565	37,905	1,877,914	931,154	2,346,973
7,213	294	5,164,744	20,718	455,887	7,892,538	10,859,625	19,208,050
386	152	347,972	801	20,897	394,727	824,206	1,239,830
1,356	528	2,060,785	3,152	89,581	3,776,412	4,969,451	8,835,444
1,084	625	1,491,430	5,279	184,155	6,447,527	5,795,499	12,425,181
907	96	680,761	4,744	77,209	1,433,650	1,716,811	3,227,670
5,358	20	3,728,534	46,613	396,818	8,918,028	7,645,626	16,960,472
6,610	2,290	8,545,133	13,311	437,270	11,653,559	21,097,502	33,188,331
7,955	1,222	11,697,999	24,702	731,011	11,197,377	43,904,537	55,832,925
23,913	633	28,065,352	1,695,650	22,682,883	57,995,037	81,973,362	162,651,282
102	3	75,877	725	6,417	164,336	197,016	367,769
381	2	342,675	3,928	139,518	1,882,559	2,120,497	4,142,604
22,755	160	15,461,548	287,870	651,958	35,927,884	29,325,290	65,905,132
409	180	406,044	1,566	28,377	744,162	924,155	1,696,694
164	8	197,565	93	13,154	38,156	504,741	556,051
650	88	361,679	1,862	15,817	445,261	680,859	1,141,937
677	36	424,125	2,935	30,173	600,403	852,476	1,483,052
956	85	891,489	7,848	144,387	4,651,131	2,742,256	7,537,774
78,623	2,985	85,546,770	660,491	12,612,506	203,981,458	173,634,965	390,228,929
4,110	49	4,002,567	23,785	478,043	6,448,183	6,766,250	13,692,476
10,866	299	14,751,261	37,970	720,200	75,645,998	30,258,247	106,624,445
5,231	598	6,011,023	35,280	688,030	18,528,296	13,467,926	32,684,252
287	24	308,032	1,207	32,010	616,815	624,622	1,273,447
1,871	7	1,874,705	18,941	231,328	2,774,327	4,359,868	7,365,523
1,426	Nil	1,519,722	27,521	181,024	3,901,609	3,514,966	7,597,599
11,720	152	10,775,919	60,454	1,591,805	14,042,882	23,145,126	38,779,813
3,893	681	3,978,071	14,236	463,221	4,869,850	10,637,289	15,970,360
981	30	852,843	5,839	88,235	1,604,729	1,977,895	3,670,859
6,684	122	6,873,154	44,326	611,375	12,194,263	20,050,537	32,856,175
8,662	30	10,837,997	245,170	4,845,559	18,539,072	15,316,330	38,700,961
15,602	23	16,256,284	114,321	1,636,866	20,769,208	18,806,965	41,213,039
4,591	708	4,701,697	14,916	522,424	13,971,146	14,070,732	33,564,302
2,699	262	2,803,495	16,525	522,386	5,075,080	10,638,212	16,235,678

¹ See footnote 1 to Table 1, p. 405.

9.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Power, Fuel,

Group or Kind of Industry.	Establishments. No.	Capital Employed. \$	Salaried Employees.		
			Male.	Female.	Salaries.
			No.	No.	£
6.—Non-Ferrous Metal Products.....	505	261,625,967	5,137	1,657	12,490,118
1 Aluminium products.....	19	3,791,756	131	37	306,199
2 Brass and copper products.....	124	21,993,841	712	172	1,548,322
3 Electrical apparatus and supplies.....	182	75,499,255	2,927	1,082	7,144,241
4 Jewellery and silverware.....	112	7,953,330	359	171	939,633
5 Miscellaneous non-ferrous metal products.....	21	1,179,766	68	25	159,110
6 Non-ferrous metal smelting and refining.....	15	145,686,299	817	118	2,055,694
7 White metal alloys.....	32	5,521,720	123	52	336,919
7.—Non-Metallic Mineral Products.....	1,188	300,455,725	4,045	885	8,176,057
1 Abrasive products.....	15	5,281,916	155	48	421,020
2 Aerated and mineral waters.....	401	12,495,396	735	146	1,197,658
3 Asbestos products.....	13	1,703,301	42	14	108,703
4 Cement.....	9	52,454,004	74	4	150,587
5 Cement products.....	94	3,024,286	122	9	156,120
6 Clay products, from domestic clay.....	139	20,502,006	198	28	374,954
7 Clay products, from imported clay.....	20	4,449,314	105	28	206,769
8 Coke and gas products.....	44	98,939,160	987	321	2,038,602
9 Glass products.....	68	14,168,575	264	92	623,090
10 Lime.....	54	5,707,391	52	9	84,741
11 Miscellaneous non-metallic mineral products.....	35	7,456,803	105	20	221,918
12 Petroleum products.....	58	64,707,454	830	99	1,957,994
13 Salt.....	10	3,776,333	71	30	193,135
14 Sand-lime brick.....	6	608,899	13	1	16,038
15 Stone, monumental and ornamental.....	222	5,180,887	292	36	424,728
8.—Chemicals and Chemical Products.....	734	147,472,534	4,989	1,879	12,336,856
1 Acids, alkalies and salts.....	18	33,381,688	584	110	1,227,893
2 Adhesives.....	17	2,066,754	51	18	128,963
3 Coal tar distillation.....	10	4,725,668	28	6	85,886
4 Explosives, ammunition and fireworks.....	8	6,290,008	373	127	887,933
5 Fertilizers.....	19	15,646,828	229	59	425,462
6 Gases, compressed.....	28	4,316,244	210	61	474,534
7 Inks, printing and writing.....	31	2,723,672	153	45	454,904
8 Medicinal and pharmaceutical preparations.....	166	20,091,688	979	530	2,760,890
9 Miscellaneous chemical products.....	118	12,101,735	419	171	1,015,524
10 Paints, pigments and varnishes.....	80	22,709,466	1,045	322	2,546,999
11 Polishes and dressings.....	46	1,839,486	130	59	288,693
12 Soaps and washing compounds.....	104	14,118,130	576	166	1,369,325
13 Toilet preparations.....	83	5,396,952	201	205	650,840
14 Wood distillation.....	6	2,064,215	11	Nil	19,010
9.—Miscellaneous Industries.....	509	63,588,796	1,847	574	4,019,872
1 Aircraft.....	7	1,574,495	55	7	102,661
2 Artificial flowers and feathers.....	16	256,611	22	19	42,264
3 Automobile accessories, fabric.....	11	493,788	16	12	41,251
4 Brooms, brushes and mops.....	78	4,091,164	223	87	420,273
5 Buttons.....	17	1,429,340	69	17	157,789
6 Candles.....	12	756,829	36	12	74,007
7 Fountain pens and pencils.....	10	1,610,830	81	28	177,542
8 Ice, artificial.....	48	4,827,420	76	15	146,352
9 Jewel cases and silverware cabinets.....	4	195,708	13	13	30,690
10 Mattresses and springs.....	61	5,800,057	236	70	547,737
11 Motion pictures.....	5	783,225	101	31	214,278
12 Musical instruments.....	15	2,451,673	54	13	88,198
13 Novelties, advertising and other.....	11	185,299	17	5	32,259
14 Pipes, tobacco.....	3	29,354	4	Nil	3,757
15 Regalia and society emblems.....	10	144,295	12	4	19,647
16 Scientific and professional equipment.....	27	4,908,292	161	94	477,378
17 Shipbuilding and repairs.....	39	28,157,880	309	36	678,022
18 Signs, electric.....	38	2,854,052	125	27	250,702
19 Stamps and stencils, rubber and metal.....	36	753,671	83	19	139,952
20 Statuary, art goods and church supplies.....	33	806,583	77	29	121,060
21 Store display accessories.....	3	119,000	6	4	12,058
22 Toys and toy equipment.....	9	242,506	17	9	46,301
23 Typewriter supplies.....	8	803,100	39	19	160,496
24 Umbrellas.....	7	189,106	13	3	28,143
25 All other industries.....	1	124,518	2	1	7,055
10.—Central Electric Stations.....	1,041	1,459,821,168	4,950	1,290	10,708,868
Totals.....	25,491	4,698,991,853	82,041	23,538	173,020,195

Materials, and Values of Products of Canadian Manufacturing Industries, 1935—con.

Employees on Wages.			Power Installed.	Cost of Fuel and Electricity.	Cost of Materials.	Value of Products.	
Male.	Female.	Wages.				Net. ¹	Gross.
No.	No.	\$	h.p.	\$	\$	\$	\$
22,781	4,038	27,825,359	416,927	5,717,809	174,906,971	107,898,470	288,523,250
752	78	783,288	5,635	128,653	3,258,310	1,605,677	4,992,640
3,115	247	3,101,590	25,174	544,147	10,584,600	8,058,275	19,187,022
8,565	2,975	10,450,518	96,260	1,070,801	25,409,806	34,672,227	61,152,834
1,707	533	2,092,717	3,025	99,594	4,519,732	4,973,333	9,592,659
167	49	190,859	388	14,730	337,338	817,967	1,170,035
8,009	Nil	10,631,662	282,847	3,776,381	126,804,075	55,665,202	186,245,658
466	156	574,725	3,598	83,503	3,993,110	2,105,789	6,182,402
17,868	544	19,249,167	222,555	11,368,432	88,969,870	75,846,415	176,184,717
773	Nil	893,252	7,253	782,553	2,684,406	5,176,971	8,643,930
1,899	90	1,708,913	3,693	160,990	3,897,616	9,793,179	13,851,785
249	22	215,151	2,404	66,793	518,994	544,495	1,130,282
846	Nil	876,829	60,334	1,227,410	394,264	3,958,369	5,580,043
386	2	295,505	2,837	37,086	459,296	657,756	1,154,138
1,502	Nil	1,012,970	24,697	618,995	60,583	2,332,985	3,012,563
636	126	657,443	2,231	187,180	530,735	1,457,062	2,174,977
2,798	1	3,589,259	32,812	2,432,111	15,233,519	20,809,159	38,474,789
2,515	264	2,667,984	12,753	837,025	3,618,175	5,478,148	9,933,348
695	Nil	471,308	7,183	686,186	124,251	2,115,354	2,925,791
488	26	468,510	13,130	184,930	1,485,435	2,567,135	4,237,500
3,917	10	5,195,230	39,176	3,847,049	58,869,814	17,233,662	79,950,525
372	Nil	404,650	3,418	175,240	38,700	1,667,038	1,880,978
57	Nil	42,662	918	17,048	43,083	94,819	154,950
735	3	749,501	9,716	107,836	1,010,999	1,960,283	3,079,118
9,311	2,754	11,378,449	130,464	4,256,062	48,316,876	66,001,290	118,574,228
1,925	8	2,263,004	70,656	2,158,692	4,606,713	12,247,210	19,012,615
311	9	294,550	1,598	114,604	550,700	770,955	1,436,259
169	1	187,393	370	131,391	1,623,137	951,810	2,606,338
922	195	1,090,625	5,981	183,330	3,207,264	5,146,920	8,587,514
707	1	813,875	19,296	344,131	4,362,594	1,368,891	6,075,616
234	5	267,097	5,490	137,134	433,045	2,507,586	3,077,765
267	30	322,877	1,749	35,461	1,081,695	1,769,697	2,886,853
981	1,174	1,739,362	3,635	157,102	7,009,191	14,126,458	21,292,458
814	428	899,238	7,036	176,198	3,449,447	4,706,478	8,332,123
1,530	163	1,695,117	7,255	289,845	9,610,743	10,440,819	20,341,407
124	77	142,051	198	15,875	959,157	1,174,207	2,149,239
973	216	1,121,693	6,108	367,775	8,980,703	6,653,670	16,002,048
197	447	426,166	644	30,639	2,121,621	3,865,684	6,017,944
157	Nil	116,001	448	113,885	420,866	271,005	805,756
7,959	1,890	8,262,608	61,785	850,171	14,691,667	21,437,115	36,978,953
222	10	225,131	638	11,666	362,854	506,179	880,699
44	172	80,124	8	1,407	91,945	197,432	290,784
88	37	99,999	156	6,706	388,152	211,270	606,128
888	219	717,682	1,866	46,338	1,548,433	1,866,703	3,461,474
360	253	384,226	708	25,669	477,788	867,249	1,370,706
58	27	53,477	72	8,965	218,556	218,193	445,714
224	227	357,391	564	17,618	967,820	886,362	1,871,800
432	14	381,716	10,903	181,469	72,545	1,327,554	1,581,568
47	51	69,285	69	3,906	123,425	153,103	285,434
1,203	220	1,176,982	4,375	89,434	3,501,112	2,793,021	6,383,567
11	3	11,815	48	5,607	608,108	473,649	1,087,364
251	11	198,177	1,181	33,852	174,797	327,019	535,668
77	48	61,212	42	2,268	104,708	155,241	262,217
17	1	10,439	15	681	10,429	15,613	26,723
13	19	19,141	29	857	28,922	62,341	92,120
428	238	682,002	3,023	78,229	2,363,265	3,158,021	5,599,515
2,620	2	2,624,364	36,483	259,342	2,021,311	5,010,719	7,291,442
375	9	401,759	154	40,058	383,011	1,238,818	1,661,887
170	4	168,191	206	8,731	104,190	405,801	518,722
176	164	238,624	737	10,207	456,805	516,425	983,437
31	2	25,236	134	2,879	15,441	50,734	69,054
124	81	123,223	53	4,003	188,921	395,531	588,455
68	28	96,471	263	7,886	272,935	405,794	686,615
24	44	46,213	20	873	171,120	127,070	299,063
8	6	9,728	38	1,520	35,004	62,273	98,797
9,218	Nil	11,811,125	7,310,973	2,054,876	Nil	135,060,035	137,114,911
366,778	110,517	417,306,709	11,657,748	84,273,129	1,420,885,153	1,302,179,099	2,807,337,381

¹ See footnote 1 to Table 1, p. 405.

Subsection 2.—Manufactures Classified by the Purpose of the Products.

Production of Manufactured Goods According to the Purpose Classification.—In addition to the classification according to the chief component material of the products used for the industrial census in detailed presentation, a separate and distinct classification, based on the chief purpose of the products, was applied for the first time to the census returns of 1922 and is presented in Table 10 for the years 1922, 1924, 1926, 1929, 1933 to 1935 in summary form, and for 1935 in more detail.

Significant changes have occurred since 1922 in the importance of the various groups shown in the purpose classification. Indicative of the increasing industrialization of the Dominion is the increase in the "industrial equipment" group from 17.0 p.c. of the total value of production in 1922 to 18.7 p.c. of the total in 1935, and the increase in "producers materials" from 26.8 p.c. to 30.1 p.c. during the same period. Another significant change is the decline in the "food" group which dropped from a production of 27.1 p.c. to 21.9 p.c. of the total. Whereas in 1922, food products comprised the leading group, in 1935 the production of producers materials ranked first in importance. It should also be noted, however, that the cost of materials in this group is abnormally high. The following other groups have improved their positions since 1922: vehicles and vessels advanced from an output of 6.5 p.c. to 7.7 p.c. of the total value of production; drink and tobacco from 4.0 p.c. to 4.3 p.c.; and books and stationery from 4.0 p.c. to 4.2 p.c. The following groups, in addition to food, declined in importance: the clothing group dropped from 9.5 p.c. to 8.9 p.c.; house furnishings from 2.5 p.c. to 1.9 p.c.; and personal utilities from 2.3 p.c. to 1.5 p.c.

In analysing the relative standing of the two groups which are perhaps of the greatest interest, it is noted that the gross production of the "food" industries in 1935 was 21.9 p.c. of the output of Canadian manufactures, as compared with an output of only 8.9 p.c. for the "clothing" industries. Aside from the fact that a much larger proportion of its products is exported, the greater value of production in the "food" group was due, in part, to the higher cost of raw materials, the value added by manufacture being 14.4 p.c. of the total for all industries in the case of the "food" group and 8.7 p.c. for the "clothing" group. The "clothing" industries also gave employment to 11,963 more persons than the "food" industries, but paid out \$2,500,234 less in salaries and wages.

From the detailed analysis of the food group for 1935 given at the end of Table 10, it will be seen that over 35 p.c. of the 1935 gross production of the group was made up of breadstuffs, and this subdivision accounts for over 40 p.c. of total salaries and wages. Meats and milk products accounted for 22 p.c. and 18 p.c., respectively, of gross production. In all these three major subdivisions the average of wages and salaries was comparatively high, being in the neighbourhood of \$1,000 for the year.

In the clothing industry, on the other hand, only in the fur goods subdivision was the \$1,000 average approximated, but this division accounted for less than 6 p.c. of the gross production of the clothing group.

10.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Purpose of the Principal Product, by Main Groups for Representative Years 1922-35, and in Detail for 1935.

Year and Purpose Heading.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products. ¹
	No.	\$	No.	\$	\$	\$
1922.						
Totals.....	22,541	3,244,302,410	474,430	510,431,312	1,283,774,723	2,482,209,130
Food.....	8,256	343,867,673	66,815	67,738,707	490,731,438	673,794,031
Drink and tobacco.....	496	104,047,461	13,402	13,777,986	33,027,203	99,529,819
Clothing.....	1,279	175,076,687	70,931	65,595,519	118,749,053	236,553,193
Personal utilities.....	936	56,060,262	16,904	17,080,049	21,879,031	57,258,476
House furnishings.....	600	75,168,053	18,032	19,861,883	24,956,960	62,961,050
Books and stationery.....	1,557	82,240,691	28,103	36,920,804	27,190,071	99,118,969
Vehicles and vessels.....	1,154	191,257,804	30,067	37,237,412	87,840,814	160,624,079
Producers materials.....	5,588	1,086,692,015	143,354	147,581,011	316,400,400	666,241,271
Industrial equipment.....	2,645	1,124,931,330	85,953	103,576,553	160,035,399	421,211,824
Miscellaneous.....	30	4,960,434	869	1,061,388	2,964,354	4,916,418
1924.						
Totals.....	22,178	3,538,813,460	508,503	559,884,045	1,438,409,681	2,695,053,582
Food.....	8,036	364,420,646	74,721	73,119,482	515,708,299	702,713,901
Drink and tobacco.....	518	124,000,298	14,702	15,748,590	39,159,283	111,877,777
Clothing.....	1,956	197,041,969	81,729	75,380,919	130,130,048	260,944,006
Personal utilities.....	341	48,367,616	9,547	11,057,386	20,304,177	41,815,384
House furnishings.....	587	64,787,015	15,820	17,142,226	22,448,984	54,944,837
Books and stationery.....	1,690	100,017,954	29,486	40,212,100	32,360,935	107,272,029
Vehicles and vessels.....	980	205,551,891	34,149	44,977,607	117,515,075	195,403,284
Producers materials.....	5,716	1,251,962,266	163,523	176,646,967	384,533,201	767,759,256
Industrial equipment.....	2,204	1,149,628,422	80,406	100,883,940	160,470,513	425,236,330
Miscellaneous.....	150	33,035,383	4,420	4,714,828	15,779,166	27,086,778
1926.						
Totals.....	22,708	3,981,569,590	581,539	653,850,933	1,728,624,192	3,221,269,031
Food.....	8,259	394,159,943	87,343	78,143,619	581,403,701	783,223,294
Drink and tobacco.....	574	137,139,189	15,341	16,817,622	45,115,122	130,895,267
Clothing.....	1,878	211,149,085	91,215	85,361,018	158,935,630	306,551,672
Personal utilities.....	384	50,497,988	10,633	12,470,247	24,236,592	49,724,101
House furnishings.....	543	60,277,954	15,684	16,858,549	22,673,689	55,353,652
Books and stationery.....	1,716	108,582,186	31,500	43,781,918	34,575,475	116,119,226
Vehicles and vessels.....	917	271,239,055	50,731	70,315,573	178,588,815	298,064,166
Producers materials.....	5,807	1,404,509,475	182,599	206,672,939	453,319,993	935,766,746
Industrial equipment.....	2,457	1,313,175,892	91,956	118,162,492	213,697,326	516,380,827
Miscellaneous.....	173	30,838,823	4,537	5,266,956	16,107,849	29,190,480
1929.						
Totals.....	23,597	5,083,014,754	694,434	813,049,842	2,032,020,975	4,029,371,340
Food.....	8,351	463,984,558	94,707	87,960,036	597,396,238	837,986,384
Drink and tobacco.....	599	201,365,785	18,976	21,670,376	65,440,053	208,968,998
Clothing.....	2,054	250,215,736	106,641	100,863,405	176,130,224	363,011,970
Personal utilities.....	380	56,155,234	11,148	13,595,331	29,389,246	61,191,750
House furnishings.....	600	76,185,921	20,857	23,248,775	34,293,465	77,811,331
Books and stationery.....	1,917	144,222,275	38,141	56,003,183	45,384,362	155,947,960
Vehicles and vessels.....	781	310,942,038	61,835	91,239,185	243,258,350	407,947,648
Producers materials.....	6,210	1,772,309,696	222,104	257,233,327	523,139,599	1,151,390,753
Industrial equipment.....	2,600	1,774,844,446	116,086	156,651,963	304,581,449	737,711,202
Miscellaneous.....	105	32,789,065	3,939	4,584,261	13,007,989	27,403,344
1933.						
Totals.....	25,232	4,689,373,704	493,903	465,562,090	969,188,574	2,086,847,847
Food.....	8,759	408,995,499	75,434	68,652,798	313,760,942	492,729,174
Drink and tobacco.....	670	185,612,678	18,289	17,626,141	40,454,300	95,409,638
Clothing.....	2,333	166,963,903	85,891	63,883,623	104,608,696	209,867,715
Personal utilities.....	601	39,681,900	8,938	8,616,372	15,323,848	35,589,961
House furnishings.....	654	66,047,002	15,587	12,887,200	16,022,584	38,684,649
Books and stationery.....	2,170	132,507,101	34,300	42,830,661	28,818,380	103,477,707
Vehicles and vessels.....	479	232,153,543	37,618	35,725,625	56,917,292	120,992,781
Producers materials.....	6,564	1,459,569,284	139,734	126,208,238	252,383,314	573,991,467
Industrial equipment.....	2,860	1,974,679,340	74,778	85,587,303	133,382,392	394,607,113
Miscellaneous.....	142	23,163,454	3,334	3,544,129	7,516,826	18,497,642
1934.						
Totals.....	25,663	4,703,917,730	545,162	533,594,635	1,230,977,053	2,533,758,954
Food.....	8,871	415,060,641	81,180	74,090,460	385,025,834	579,314,257
Drink and tobacco.....	680	181,802,821	18,348	18,316,163	42,394,220	106,791,466
Clothing.....	2,413	170,761,461	91,589	69,907,983	121,511,064	236,028,354
Personal utilities.....	616	39,466,768	10,029	9,565,177	18,721,601	40,313,288
House furnishings.....	670	66,913,599	16,981	14,630,504	20,798,552	46,825,546
Books and stationery.....	2,247	133,383,455	35,445	44,495,558	31,927,029	111,421,559
Vehicles and vessels.....	497	221,882,415	41,185	44,644,716	90,699,378	175,812,392
Producers materials.....	6,646	1,443,937,708	162,980	156,167,795	339,004,465	744,104,440
Industrial equipment.....	2,866	2,006,485,870	83,657	97,396,113	171,387,338	470,745,065
Miscellaneous.....	157	23,622,992	3,768	3,980,166	9,507,772	22,402,587

¹ See footnote 1 to Table 1, p. 405. Net values are not available for the purpose classification.

10.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Purpose of the Principal Product, by Main Groups for Representative Years 1922-1935, and in Detail for 1935—concluded.

Year and Purpose Heading.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products. ¹
	No.	\$	No.	\$	\$	\$
1935.						
Totals	25,491	4,698,991,853	582,874	590,326,904²	1,420,885,153	2,807,337,381
Food.....	8,561	405,894,748	83,930	78,173,759 ²	415,364,620	614,425,247
Drink and tobacco.....	677	183,501,357	19,165	19,785,411	49,941,998	121,157,062
Clothing.....	2,444	177,567,199	95,893	75,673,525	129,135,498	249,520,483
Personal utilities.....	612	39,588,755	10,284	10,333,919	21,585,937	43,453,234
House furnishings.....	679	66,402,670	18,018	15,911,383	24,494,871	52,944,629
Books and stationery.....	2,262	128,707,801	36,626	46,896,177	34,354,450	117,736,267
Vehicles and vessels.....	464	226,007,916	45,717	53,362,973	120,325,337	215,103,397
Producers materials.....	6,737	1,410,095,540	177,160	175,890,774	427,693,908	845,108,272
Industrial equipment.....	2,897	2,037,312,404	91,835	109,494,019	187,338,713	524,836,751
Miscellaneous.....	158	23,913,463	4,246	4,804,964	10,649,821	23,052,039
1935—DETAIL.						
Food	8,561	405,894,748	83,930	78,173,759²	415,364,620	614,425,247
Breadstuffs.....	4,470	153,543,234	36,476	32,514,902	135,152,805	218,054,986
Fish.....	630	17,144,806	4,766	2,874,553	14,772,722	23,458,356
Fruits and vegetables.....	298	38,272,379	7,912	5,063,481	22,252,826	38,276,487
Meats.....	198	59,354,626	11,038	12,803,375	109,431,151	135,295,407
Milk products.....	2,640	65,919,583	15,855	15,142,428 ²	70,042,565	110,152,368
Oils and fats.....	4	112,677	25	27,789	66,469	139,619
Sugar industries.....	8	33,017,874	2,134	3,086,691	25,137,558	36,597,997
Infusions.....	86	13,431,195	2,118	2,537,077	17,543,308	24,214,761
Miscellaneous.....	221	25,098,374	3,606	4,123,463	14,965,206	28,235,266
Drink and Tobacco	677	183,501,357	19,165	19,785,411	49,941,998	121,157,062
Beverages, alcoholic.....	89	99,973,349	8,048	8,068,913	36,813,401	56,813,401
Beverages, non-alcoholic.....	451	19,831,979	3,491	3,553,248	5,394,584	17,004,023
Tobacco.....	137	63,696,029	9,634	8,163,250	26,508,441	47,330,638
Clothing	2,444	177,567,199	95,893	75,673,525	129,135,498	249,520,483
Boots and shoes.....	217	24,315,445	15,930	11,742,871	19,431,799	35,969,912
Fur goods.....	322	11,432,808	3,724	3,797,913	8,163,673	13,893,417
Garments and personal furnishings.....	1,072	58,500,315	40,221	32,159,763	68,333,244	119,803,888
Gloves and mittens.....	54	3,036,690	1,990	1,341,072	2,214,605	4,226,553
Hats and caps.....	185	6,707,611	4,468	3,781,669	5,640,956	11,815,262
Knitted goods.....	163	50,048,900	18,511	14,252,653	22,948,056	46,390,103
Waterproofs.....	15	759,872	297	258,450	664,227	1,090,087
Miscellaneous textiles, n.e.s.....	416	22,767,558	10,752	8,339,134	1,738,936	16,311,261
Personal Utilities	612	39,588,755	10,284	10,333,919	21,585,937	43,453,234
Jewellery and timepieces.....	116	8,149,038	2,894	3,132,325	4,643,157	9,878,093
Recreational supplies.....	61	4,222,457	1,273	1,016,184	1,107,880	2,820,817
Personal utilities.....	435	27,217,260	6,117	6,185,410	15,834,900	30,754,324
House Furnishings	679	66,402,670	18,018	15,911,383	24,494,871	52,944,629
Books and Stationery	2,262	128,707,801	36,626	46,896,177	34,354,450	117,736,267
Vehicles and Vessels	464	226,007,916	45,717	53,362,973	120,325,337	215,103,397
Producers Materials	6,737	1,410,095,540	177,160	175,890,774	427,693,908	845,108,272
Farm materials.....	19	15,646,828	996	1,239,337	4,362,594	6,075,616
Manufacturers materials.....	1,117	1,102,343,945	117,821	126,204,359	330,059,638	651,850,682
Building materials.....	5,004	221,869,857	43,440	35,011,831	66,336,121	134,648,112
General materials.....	597	70,234,910	14,903	13,435,247	26,935,505	52,533,862
Industrial Equipment	2,897	2,037,312,404	91,835	109,494,019	187,338,713	524,836,751
Farming equipment.....	41	55,713,461	5,094	5,361,495	6,497,252	13,831,136
Manufacturing equipment.....	224	61,044,427	9,547	11,045,724	12,588,990	34,096,005
Trading equipment.....	144	9,542,542	1,693	1,876,404	952,330	4,780,063
Service equipment.....	275	30,562,972	6,008	7,012,207	11,273,522	31,234,028
Light, heat, and power equip- ment.....	1,465	1,715,390,000	42,623	55,867,256	102,682,355	324,796,557
General equipment.....	748	165,059,002	26,930	28,330,933	53,343,764	116,098,962
Miscellaneous	158	23,913,463	4,246	4,804,964	10,649,821	23,052,039

¹ See footnote 1 to Table 1, p. 405. Net values are not available for the purpose classification.

² Exclusive of employees in the butter and cheese industry in Quebec.

Subsection 3.—Manufactures Classified by Origin of the Materials.

Classification of Manufacturing Production According to the Origin of the Materials Worked Upon.—The principal statistics of the manufactures of Canada, classified upon the basis of "origin", are presented in Table 11 for the years 1924, 1926, 1929, 1933 to 1935. By this means Canadian manufacturing production may be analysed from a new angle, one by means of which interesting comparisons can be made with the external trade classification according to origin.

The distinction made between farm materials of Canadian and foreign origin is based on whether the materials are indigenous to Canada rather than their actual source. Thus, the industries included in the foreign origin classes are those depending upon materials which cannot be grown in Canada, such as tea, coffee, spices, cane sugar, rice, rubber, cotton, etc., but it should be understood that industries included in the Canadian origin classes may be using large quantities of imported corn, fruit, tobacco, hides, wool, etc.

While the period reviewed in the following table covers only the short space of the 12 years from 1924 to 1935, interesting changes have taken place in the relative importance of the industries based on materials from the different origins. Since the purpose of such a comparison is to discover the relative importance of the manufacturing work done upon materials from the different origins, the figures of net value of products or the value added to the raw materials by the manufacturing processes will give a more accurate measure of the importance of the industrial groups than the figures of gross value of products.

The value added in the manufacture of materials of mineral origin represented 32.5 p.c. of the total value added by manufacture in all industries in 1935. This group advanced from second place in 1924 when the percentage of the total was 27.9. The second largest group from the point of view of value added is that of farm origin which accounted for 27.9 p.c. of the total value in 1935. This group was in first place in 1924 with 30.7 p.c. of the total. The value added by the industries of the forest group, which are third in importance, declined from 23.8 p.c. of the total in 1924 to 18.7 p.c. in 1935. On the other hand, central electric stations bettered their position, the percentages of the totals being 7.6 in 1924 and 9.9 in 1935. The above percentages of values added are based on the old method of computation, whereby the materials only are deducted from the gross value of products. The increase during the period under review in the relative importance of the industries of the mineral group was probably due to a number of influences. The expansion of the motor vehicle industry, the rapid growth in the use of electrical equipment, growing dependence of the construction industry upon large quantities of steel, cement, and various other manufactured mineral products, and the development of metallurgical plants in Canada were some factors in the growing importance of the mineral group of industries. Another factor in this trend has been the growing appreciation and development of the wealth of the mineral resources of Canada. Not only have the various mining activities made the raw materials for mineral industries more readily available, but those activities have also required large quantities of machinery, electrical apparatus, and other finished products of mineral origin.

In the year 1935, the industries of the farm group exceeded those of any other group in the gross value of products with 35.1 p.c. of the total, as compared with 34.3 p.c. for the mineral and 15.4 p.c. for the forest origin group. These three principal groups stood in the same order of importance with regard to the number of persons employed. In salaries and wages paid, the mineral origin group ranked first, followed by the farm origin and forest origin groups. In the matter of capital

invested, central electric stations led with 31.1 p.c. of the total, followed by the mineral group with 26.8 p.c., the forest group with 18.4 p.c. and the farm group with 17.8 p.c.

11.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Origin of the Material Used, by Main Groups for Representative Years 1924-35.

Year and Origin.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products. ¹
	No.	\$	No.	\$	\$	\$
1924.						
Grand Totals	22,178	3,538,813,460	508,503	559,884,045	1,433,409,681	2,695,053,582
Farm Origin—						
(a) From field crops.....	4,595	525,717,571	89,436	87,789,237	433,443,376	691,513,259
Canadian origin.....	4,311	299,158,049	51,462	53,793,131	270,753,367	440,469,831
Foreign origin.....	284	226,559,522	37,974	33,996,106	162,690,009	251,043,428
(b) From animal husbandry.....	4,086	253,858,982	64,671	66,696,501	285,502,644	413,007,421
Canadian origin.....	4,068	247,073,900	63,052	65,424,526	282,604,516	407,766,406
Foreign origin.....	18	6,785,082	1,619	1,271,975	2,898,128	5,241,015
Totals, Farm Origin	8,681	779,576,553	154,107	154,485,738	718,946,020	1,104,520,680
Canadian origin.....	8,379	546,231,949	114,514	119,217,657	553,357,833	848,236,237
Foreign origin.....	302	233,344,604	39,593	35,268,081	165,588,137	256,284,443
Wild life origin.....	226	10,837,249	2,144	3,194,213	7,506,169	13,386,266
Marine origin.....	836	20,304,785	11,957	3,344,348	16,089,332	26,637,962
Forest origin.....	6,873	876,149,932	126,907	147,719,245	245,183,429	544,282,597
Mineral origin.....	2,806	1,010,517,944	136,837	171,068,497	349,800,585	700,602,097
Mixed origin.....	1,805	212,861,904	63,723	62,125,420	100,884,146	211,054,212
Central electric stations.....	951	628,565,093	12,828	17,946,684	Nil	95,169,768
1926.						
Grand Totals	22,708	3,981,569,590	581,539	653,850,933	1,728,624,192	3,221,269,231
Farm Origin—						
(a) From field crops.....	4,697	565,932,312	99,200	95,403,666	486,522,508	773,023,228
Canadian origin.....	4,434	323,033,863	56,017	54,719,806	299,452,868	486,709,022
Foreign origin.....	263	242,898,449	43,183	40,683,860	187,069,640	286,314,206
(b) From animal husbandry.....	4,149	258,779,323	68,362	71,675,146	337,243,258	475,760,979
Canadian origin.....	4,137	248,759,804	65,939	69,690,146	333,770,293	467,253,826
Foreign origin.....	12	10,019,519	2,423	1,985,000	3,472,965	8,507,153
Totals, Farm Origin	8,846	824,711,635	167,562	167,078,812	823,765,766	1,248,784,207
Canadian origin.....	8,571	571,793,667	121,956	124,409,952	633,223,161	953,962,848
Foreign origin.....	275	252,917,968	45,606	42,668,860	190,542,605	294,821,359
Wild life origin.....	232	13,321,668	3,662	4,328,731	12,459,350	21,775,688
Marine origin.....	831	28,868,071	17,408	5,622,837	22,084,129	36,190,764
Forest origin.....	6,710	926,726,166	133,428	159,969,652	260,039,864	597,551,657
Mineral origin.....	3,284	1,200,704,022	173,515	226,802,705	489,898,292	982,103,019
Mixed origin.....	1,748	231,017,962	72,558	70,105,196	120,426,791	245,930,163
Central electric stations.....	1,057	756,220,066	13,406	19,943,000	Nil	88,933,733
1929.						
Grand Totals	23,597	5,083,014,754	694,434	813,049,842	2,032,020,975	4,029,371,340
Farm Origin—						
(a) From field crops.....	5,191	697,206,163	114,236	115,201,292	496,842,580	889,075,246
Canadian origin.....	4,893	436,282,846	67,234	67,235,530	326,292,523	598,311,861
Foreign origin.....	298	260,923,317	47,002	47,965,762	170,550,057	290,763,385
(b) From animal husbandry.....	3,873	300,457,360	71,818	76,931,259	361,854,627	522,170,403
Canadian origin.....	3,850	272,178,703	67,446	73,105,463	355,763,503	507,694,323
Foreign origin.....	23	28,278,657	4,372	3,825,796	6,091,124	14,476,080
Totals, Farm Origin	9,064	997,663,523	186,054	192,132,551	858,697,207	1,411,245,649
Canadian origin.....	8,743	708,461,549	134,680	140,340,993	682,056,026	1,106,006,184
Foreign origin.....	321	289,201,974	51,374	51,791,558	176,641,181	305,239,465
Wild life origin.....	234	14,338,686	3,767	4,783,323	12,847,817	20,861,039
Marine origin.....	730	28,644,442	16,367	5,411,855	21,496,859	34,966,260
Forest origin.....	7,353	1,148,558,242	163,863	191,041,307	313,088,964	722,269,066
Mineral origin.....	3,219	1,550,662,908	218,879	304,027,803	678,683,203	1,302,499,868
Mixed origin.....	1,973	287,415,421	89,340	90,818,182	147,206,925	324,646,012
Central electric stations.....	1,024	1,055,731,532	16,164	24,831,821	Nil	122,833,446

¹ See footnote 1 to Table 1, p. 405. Net values are not available for the origin classification.

11.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Origin of the Material Used, by Main Groups for Representative Years 1924-35—concluded.

Year and Origin.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products. ¹
	No.	\$	No.	\$	\$	\$
1933.						
Grand Totals.....	25,232	4,689,373,704	493,903	465,562,090	969,188,574	2,086,847,847
Farm Origin—						
(a) From field crops.....	5,746	609,044,529	93,433	81,655,182	263,007,043	494,048,930
Canadian origin.....	5,424	393,913,114	59,378	51,750,819	173,684,115	322,289,909
Foreign origin.....	322	215,131,415	34,055	29,904,363	89,322,928	171,759,021
(b) From animal husbandry.....	3,978	265,730,399	72,970	62,195,099	199,671,203	320,662,509
Canadian origin.....	3,949	235,537,529	65,169	56,056,567	191,875,661	297,907,540
Foreign origin.....	29	30,192,870	7,801	6,138,532	7,795,542	22,754,969
Totals, Farm Origin.....	9,724	874,774,928	166,403	143,850,281	462,678,246	814,711,439
Canadian origin.....	9,373	629,450,643	124,547	107,807,386	365,559,776	620,197,449
Foreign origin.....	351	245,324,285	41,856	36,042,895	97,118,470	194,513,990
Wild life origin.....	335	10,507,157	3,498	3,481,885	7,159,079	13,000,927
Marine origin.....	620	15,532,775	4,064	2,287,385	10,960,289	17,380,323
Forest origin.....	77,796	882,445,602	102,807	99,046,012	233,550,374	335,886,257
Mineral origin.....	3,539	1,306,641,651	130,565	138,101,092	171,434,337	601,428,003
Mixed origin.....	2,177	212,939,536	71,849	57,363,558	83,406,249	186,908,817
Central electric stations.....	1,041	1,386,532,055	14,717	21,431,877	Nil	117,532,081
1934.						
Grand Totals.....	25,663	4,703,917,730	545,162	533,594,635	1,230,977,053	2,533,758,954
Farm Origin—						
(a) From field crops.....	5,866	607,420,061	99,966	89,167,003	308,435,652	566,150,163
Canadian origin.....	5,528	393,120,615	62,345	55,172,004	200,631,739	365,799,890
Foreign origin.....	338	214,299,446	37,621	33,984,699	107,803,913	200,350,273
(b) From animal husbandry.....	3,955	273,632,909	79,824	68,772,951	249,605,928	382,505,562
Canadian origin.....	3,926	239,440,017	70,604	61,236,979	240,051,996	356,626,503
Foreign origin.....	29	34,192,892	9,220	7,535,972	9,553,932	25,879,059
Totals, Farm Origin.....	9,821	881,052,970	179,790	157,934,954	558,041,580	948,655,725
Canadian origin.....	9,454	632,560,632	132,949	116,414,283	440,683,735	722,426,393
Foreign origin.....	367	248,492,338	46,841	41,520,671	117,357,845	226,229,332
Wild life origin.....	334	12,031,578	3,651	3,645,440	8,258,147	14,156,511
Marine origin.....	665	17,372,799	4,663	2,870,119	15,567,160	24,056,927
Forest origin.....	7,946	873,518,030	113,842	113,571,898	153,644,299	397,058,771
Mineral origin.....	3,556	1,271,242,338	150,694	169,962,858	395,976,386	809,659,506
Mixed origin.....	2,298	217,847,849	77,548	63,779,875	99,489,481	215,707,901
Central electric stations.....	1,043	1,430,852,166	14,974	21,829,491	Nil	124,463,613
1935.						
Grand Totals.....	25,491	4,698,991,853	582,874	590,326,904	1,420,885,153	2,807,337,381
Farm Origin—						
(a) From field crops.....	5,620	592,460,185	102,120	92,346,954	332,576,494	594,405,019
Canadian origin.....	5,268	385,787,001	64,088	58,212,158	219,828,843	392,090,889
Foreign origin.....	352	206,673,184	38,032	34,134,796	112,747,651	202,314,130
(b) From animal husbandry.....	3,881	242,276,644	74,556	67,115,718	264,608,357	389,696,072
Canadian origin.....	3,881	242,276,644	74,556	67,115,718	264,608,357	389,696,072
Foreign origin.....	2	2	2	2	2	2
Totals, Farm Origin.....	9,501	834,736,829	176,676	159,462,672	597,184,851	984,101,091
Canadian origin.....	9,149	628,063,645	138,644	125,327,876	484,437,200	781,786,961
Foreign origin.....	352	206,673,184	38,032	34,134,796	112,747,651	202,314,130
Wild life origin.....	322	11,432,808	3,724	3,797,913	8,163,673	13,893,417
Marine origin.....	630	17,144,806	4,766	2,874,553	14,772,722	23,458,356
Forest origin.....	8,058	862,608,889	120,578	123,959,435	173,104,957	432,743,826
Mineral origin.....	3,603	1,260,176,377	171,051	202,180,299	511,639,555	961,973,179
Mixed origin.....	2,336	253,070,976	90,621	75,532,039	116,019,395	254,052,601
Central electric stations.....	1,041	1,459,821,168	15,458	22,519,993	Nil	137,114,911

¹ See footnote 1 to Table 1, p. 405. Net values are not available for the origin classification.

² This origin classification included in former years "silk mills" with a small number of artificial silk establishments. Of late years the latter have become the most important and the statistics are now combined with those for "mixed origin".

Subsection 4.—The Forty Leading Manufacturing Industries.

A prominent feature of Canadian manufacturing development in recent years has been the growth of non-ferrous metal smelting. This industry, based upon mineral resources, has now taken its place among the leading manufactures along with the industries based upon forest, agricultural and live-stock resources. The central electric stations and dyeing, cleaning and laundry industries are not now included among manufacturing industries. The change was made for the year 1936 and the figures of rank in the statement below have been made comparable by dropping central electric stations for each of the years.

In the following statement, the rank of the ten leading industries in 1936, from the standpoint of gross value of production, is compared with their respective ranks in representative years since 1922.

THE TEN LEADING INDUSTRIES, 1936, COMPARED AS TO RANK FOR
REPRESENTATIVE YEARS 1922-35.

Industry.	Rank in—						
	1936.	1935.	1934.	1933.	1929.	1926.	1922.
Non-ferrous metal smelting and refining..	1	1	2	2	9	9	37
Pulp and paper.....	2	2	1	1	1	1	2
Slaughtering and meat packing.....	3	3	3	3	2	3	3
Flour and feed mills.....	4	6	4	4	3	2	1
Butter and cheese.....	5	5	5	5	6	6	5
Automobiles.....	6	4	7	11	4	5	6
Petroleum products.....	7	7	6	6	10	11	9
Sawmills.....	8	8	11	14	5	4	4
Electrical apparatus and supplies.....	9	9	14	16	8	13	16
Cotton yarn and cloth.....	10	11	8	8	13	8	7

The incidence of the depression resulted in a re-arrangement in the rank of many industries which has already proved temporary in some cases. The suspension or curtailment of capital expenditures greatly reduced the output of such important industries as: sawmills, electrical equipment, automobiles, railway rolling-stock, primary iron and steel, machinery, etc. On the other hand, the demand for goods for immediate consumption was more stable, including such industries as: petroleum products, bakeries, cotton yarn and cloth, printing and publishing, clothing, tobacco, beverages, etc. However, as previously stated, some return to the pre-depression order of importance is in evidence. Comparing the rankings for 1936 with those for 1935, it may be noted that flour and feed mills came up from sixth place to fourth place, whereas just the opposite was true of automobiles. All other industries, among the leading ten, held their relative positions with the exception of cotton yarn and cloth which ranked as eleventh in 1935 but was tenth in 1936, replacing bread and other bakery products. Railway rolling-stock improved its position from seventeenth in 1935 to fourteenth in 1936. On the whole, however, the changes for the latest year are not very pronounced.

12.—Principal Statistics of the Forty Leading Industries of Canada, Ranked According to the Gross Value of the Products, 1935.

Industry.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and Wages.	Cost of Materials.	Value of Products.	
						Net. ¹	Gross.
	No.	\$	No.	\$	\$	\$	\$
1 Non-ferrous metal smelting and re- fining.....	15	145,686,299	8,944	12,687,356	126,804,075	55,665,202	186,245,658
2 Pulp and paper.....	95	545,572,938	27,836	35,893,313	57,995,037	81,973,362	162,651,282
3 Central electric sta- tions.....	1,041	1,459,821,168	15,458	22,519,993	Nil	135,060,035	137,114,911
4 Slaughtering and meat packing.....	139	58,207,715	10,674	12,448,347	108,191,810	23,960,322	133,379,312
5 Automobiles.....	20	40,765,548	13,095	18,797,599	75,645,998	30,258,247	106,624,445
6 Butter and cheese.....	2,589	58,291,763	14,786	13,905,135	69,953,193	28,293,638	99,888,971
7 Flour and feed mills.....	1,127	56,475,315	5,454	5,165,507	78,071,667	18,139,432	97,567,868
8 Petroleum products.....	58	64,707,454	4,856	7,153,224	58,869,814	17,233,662	79,950,525
9 Sawmills.....	3,698	75,973,627	25,727	17,711,657	35,927,884	29,325,290	65,905,132
10 Electrical apparatus and supplies.....	182	75,499,255	15,549	17,594,759	25,409,806	34,672,227	61,152,834
11 Bread and other bakery products...	3,045	43,788,924	19,167	16,369,912	28,343,545	29,141,417	59,400,668
12 Cotton yarn and cloth.....	35	70,741,613	18,121	13,206,265	33,689,873	23,812,460	59,378,664
13 Rubber goods in- cluding footwear.....	45	63,435,798	11,023	11,017,431	20,258,774	34,501,782	55,949,570
14 Printing and pub- lishing.....	793	53,721,846	16,889	23,061,512	11,197,377	43,904,537	55,832,925
15 Clothing, factory, women's.....	591	22,668,528	17,894	14,593,861	31,642,215	21,939,567	53,796,274
16 Hosiery and knitted goods.....	163	50,048,900	18,511	14,252,653	22,948,056	22,688,647	46,390,103
17 Railway rolling-stock	37	86,547,010	16,921	18,785,671	20,769,208	18,806,965	41,213,039
18 Biscuits, confection- ery, cocoa, etc.....	234	37,779,319	10,446	9,315,563	19,231,189	21,266,428	41,197,833
19 Breweries.....	73	57,928,298	4,460	6,155,642	15,024,625	24,966,377	40,699,040
20 Tobacco, cigars, and cigarettes.....	116	58,178,513	8,145	7,221,048	19,701,385	19,244,706	39,103,875
21 Castings and forgings	303	63,555,479	13,760	14,138,972	14,042,832	23,145,126	38,779,813
22 Primary iron and steel.....	53	86,465,490	9,523	12,279,390	18,539,072	15,316,330	38,700,961
23 Coke and gas pro- ducts.....	44	98,939,160	4,107	5,627,861	15,233,519	20,809,159	38,474,789
24 Fruit and vegetable preparations.....	298	38,272,379	7,912	5,063,481	22,252,826	15,446,860	38,276,487
25 Sugar refineries.....	8	33,017,874	2,134	3,086,691	25,137,568	10,496,252	36,597,997
26 Clothing, factory, men's.....	170	16,271,865	9,296	8,990,370	20,676,934	15,769,464	36,578,897
27 Boots and shoes, leather.....	217	24,313,445	15,930	11,742,871	19,431,799	16,276,684	35,989,912
28 Sheet metal products	129	47,369,004	6,580	6,802,698	18,971,146	14,070,732	33,564,302
29 Printing and book- binding.....	1,182	40,331,944	12,194	13,707,159	11,653,559	21,097,502	33,188,331
30 Machinery.....	211	59,899,705	8,949	10,531,251	12,194,263	20,050,537	32,856,175
31 Automobile supplies.	82	23,260,333	6,614	7,411,434	18,528,296	13,467,926	32,684,252
32 Silk and artificial silk.....	33	35,063,023	10,088	8,371,037	10,946,739	16,166,863	28,045,340
33 Coffee, tea and spices	86	13,431,195	2,118	2,537,077	17,543,308	6,568,747	24,214,761
34 Boxes and bags, paper.....	146	21,153,422	5,562	5,432,060	12,952,362	10,278,576	23,466,368
35 Fish curing and packing.....	630	17,144,806	4,766	2,874,553	14,772,722	8,340,663	23,458,356
36 Furnishing goods, men's.....	176	15,569,465	8,957	5,788,255	13,916,201	9,095,917	23,152,780
37 Medicinal and phar- macological prepar- ations.....	166	20,091,688	3,664	4,500,252	7,009,191	14,126,458	21,292,751
38 Leather tanneries.....	85	22,982,210	3,967	3,920,106	12,991,558	7,006,369	20,497,553
39 Paints and varnishes.	80	22,709,466	3,060	4,242,116	9,610,743	10,440,819	20,341,407
40 Woollen cloth.....	65	19,620,649	6,305	5,108,603	10,342,336	8,402,570	19,343,305
Totals, Forty Lead- ing Industries...	18,260	3,845,332,433	429,442	440,012,685	1,166,422,555	991,227,857	2,222,947,466
Totals, All Indus- tries.....	25,491	4,698,991,853	582,874	590,326,904	1,420,885,153	1,302,179,099	2,807,337,381
Percentage of forty leading industries to all industries...	71.6	81.2	73.7	74.5	82.9	76.1	79.2

¹ See footnote 1 to Table 1, p. 405.

12A.—Principal Statistics of the Forty Leading Industries of Canada, Ranked According to Gross Value of Products, 1936.

NOTE.—The central electric stations and dyeing, cleaning and laundry industries ceased to be regarded as 'manufacturing' industries for 1936, and figures for previous years will be adjusted as soon as possible. This affects the comparability of the figures given in this table in comparison with those of earlier years.

Industry.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and Wages.	Cost of Materials.	Value of Products.	
						Net. ¹	Gross.
	No.	\$	No.	\$	\$	\$	\$
1 Non-ferrous metal smelting and re- fining.....	15	143,858,717	10,015	14,346,050	154,604,285	71,276,645	229,737,420
2 Pulp and paper.....	93	539,350,001	30,054	40,063,852	72,202,983	87,150,666	185,144,603
3 Slaughtering and meat packing.....	142	61,806,675	11,776	13,921,410	126,630,086	29,028,206	156,971,640
4 Flour and feed mills.....	1,118	61,867,287	5,685	5,542,945	90,614,236	22,680,670	114,617,099
5 Butter and cheese....	2,573	60,201,575	15,545	14,772,250	80,983,372	30,018,633	112,712,327
6 Automobiles.....	16	46,497,259	12,933	18,164,042	71,201,646	33,450,762	105,350,035
7 Petroleum products.....	63	61,883,926	5,019	7,309,955	66,555,885	15,313,844	85,802,363
8 Sawmills.....	3,638	78,294,341	28,786	21,357,033	43,598,856	35,982,667	80,343,291
9 Electrical apparatus and supplies.....	186	79,794,524	17,037	19,501,882	30,484,468	40,616,138	72,288,548
10 Cotton yarn and cloth	35	71,564,646	17,910	14,218,231	37,042,911	26,636,505	65,635,365
11 Bread and other bakery products....	3,101	46,108,482	19,598	17,703,572	32,124,708	31,458,312	65,558,437
12 Rubber goods, in- cluding footwear....	50	64,600,479	11,881	11,954,016	23,598,661	37,199,378	62,054,808
13 Printing and pub- lishing.....	789	53,273,296	17,377	24,035,719	11,967,553	45,559,802	58,275,911
14 Railway rolling-stock	37	83,258,169	18,633	22,161,277	30,486,569	24,701,059	56,969,453
15 Clothing, factory, women's.....	583	25,114,251	18,924	15,255,725	32,706,792	23,187,289	56,118,773
16 Hosiery and knitted goods.....	168	51,398,678	19,429	15,120,277	24,360,941	24,337,987	49,469,140
17 Fruit and vegetable preparations.....	304	41,572,514	9,258	6,066,761	27,455,449	19,215,422	47,337,397
18 Primary iron and steel	55	92,103,774	11,138	13,830,377	21,424,052	19,772,711	46,636,892
19 Biscuits, confection- ery, cocoa, etc.....	206	39,802,756	11,201	10,101,275	22,191,155	23,120,592	46,051,641
20 Breweries.....	70	55,969,772	4,604	6,517,804	15,540,509	27,796,122	44,047,794
21 Machinery.....	218	61,206,866	10,277	12,305,422	15,761,565	25,005,145	41,447,473
22 Clothing, factory, men's.....	188	18,570,959	10,578	10,255,745	22,728,166	17,647,628	40,526,745
23 Sugar refineries.....	10	33,199,993	2,559	3,413,698	27,924,998	11,430,093	40,405,377
24 Tobacco, cigars, and cigarettes.....	95	58,785,097	7,593	7,207,737	20,111,289	20,020,045	40,287,359
25 Sheet metal products	138	50,323,623	7,482	7,942,190	22,617,288	16,796,358	39,994,151
26 Coke and gas prod- ucts.....	42	93,088,722	4,116	5,714,483	16,585,571	20,505,282	39,871,898
27 Boots and shoes, leather.....	219	25,318,549	15,961	11,622,002	18,889,035	16,372,950	35,543,115
28 Printing and book- binding.....	1,224	41,738,465	12,677	14,509,486	12,404,562	22,243,119	35,099,335
29 Automobile supplies.	85	24,730,610	6,842	7,776,726	18,453,840	14,203,086	33,378,508
30 Castings and forgings	238	46,429,034	10,391	11,225,938	11,524,940	18,184,280	31,011,884
31 Silk and artificial silk.....	35	34,947,643	10,189	8,877,373	10,732,371	15,221,509	26,930,821
32 Fish curing and pack- ing.....	624	18,614,592	5,252	3,279,581	16,459,938	9,837,729	26,684,801
33 Coffee, tea and spices	92	13,347,535	2,086	2,364,413	19,140,291	7,172,270	26,412,092
34 Boxes and bags, paper	141	20,919,171	5,902	5,761,998	14,310,960	11,022,583	25,588,431
35 Brass and copper prod- ucts.....	126	22,890,531	4,596	5,293,457	14,182,328	10,198,031	24,947,467
36 Furnishing goods, men's.....	176	16,626,096	9,410	6,363,980	14,743,645	9,735,990	24,625,615
37 Leather tanneries.....	87	23,274,558	4,306	4,227,441	15,394,863	7,379,439	23,294,210
38 Paints, pigments and varnishes.....	78	23,274,558	3,124	4,428,387	10,817,694	11,544,616	22,651,225
39 Medicinal and phar- maceutical prepar- ations.....	169	20,760,912	3,857	4,797,458	7,384,370	14,697,547	22,251,550
40 Furniture.....	425	26,577,141	9,677	8,111,877	9,251,878	12,460,577	22,177,929
Totals, Forty Lead- ing Industries....	17,652	2,433,298,946	443,678	457,423,850	1,335,194,709	960,181,687	2,364,252,923
Totals, All Indus- tries.....	24,202	3,271,263,531	594,359	612,071,434	1,624,213,996	1,289,592,672	3,002,403,814
Percentages of forty leading industries to all industries....	72.9	74.4	74.6	74.7	82.2	74.5	78.7

¹ See footnote 1 to Table 1, p. 405.

Section 3.—Provincial Distribution of Manufacturing Production.

Ontario and Quebec are the most important manufacturing provinces of Canada. Their combined production in 1935 amounted to \$2,244,583,270 or nearly 80 p.c. of the gross value of manufactured products of the Dominion. The proximity of Ontario to the coal-fields of Pennsylvania, the water-power and other varied resources of the two provinces, and their nearness to the larger markets of Canada and the United States have all contributed to the above result. British Columbia had in 1935 the third largest gross manufacturing production, with 7.1 p.c. of the total, and Manitoba the fourth with 4.2 p.c. Alberta, Nova Scotia, New Brunswick, Saskatchewan, and Prince Edward Island followed in the order named.

Subsection 1.—The Manufactures of the Maritime Provinces, 1935.

Table 13 gives the statistics of each of the Maritime Provinces for the year 1935. In Prince Edward Island, fish canning and curing, with a gross production of \$633,242 was foremost, followed by butter and cheese, slaughtering and meat packing, central electric stations, etc. Manufacturing in Nova Scotia and New Brunswick is, of course, dominated to a considerable extent by the steel and forest industries in the former and the forest industries in the latter, although there is a large sugar refinery in each province. The pulp and paper industry, with a gross value of production of \$14,860,796 in 1935, was the most important industry in New Brunswick, followed by sawmills with an output of \$4,453,221, central electric stations with an output of \$3,233,679, the coffee, tea and spice industry with an output of \$2,803,886, and fish canning and curing with a value of production of \$2,462,790. These five industries combined provided 49.4 p.c. of the gross manufacturing production of the province. In Nova Scotia, primary iron and steel was in first place. This industry was so severely affected by the depression that in 1933 it was only in fourth place, but it recovered first place in 1934 and maintained this position in 1935. The increase in production was about 112 p.c., from \$3,763,242 in 1933 to \$7,987,949 in 1935. Other leading industries with their values of production were: fish curing and packing, \$5,368,117; central electric stations, \$5,096,453; pulp and paper, \$4,331,670; sawmills, \$2,276,841; butter and cheese, \$2,120,922.

13.—Statistics of the Leading Industries of each of the Maritime Provinces, 1935.

PRINCE EDWARD ISLAND.

Industry.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products. ¹
	No.	\$	No.	\$	\$	\$
1 Fish curing and packing.....	95	189,375	325	70,743	469,306	633,242
2 Butter and cheese.....	28	262,697	87	53,610	378,736	488,472
3 Slaughtering and meat packing...	3	96,652	44	34,882	285,412	384,363
4 Central electric stations.....	12	1,160,625	59	59,350	Nil	278,727
5 Printing and publishing.....	4	261,626	96	82,238	20,578	172,612
6 Flour and feed mills.....	11	57,478	14	7,235	114,365	166,290
7 Bread and other bakery products	11	100,502	46	29,966	80,222	138,371
8 Sawmills.....	54	135,014	81	17,691	71,673	129,800
9 Foods, stock and poultry.....	3	45,227	21	23,110	60,594	124,878
10 All other leading industries ²	3	397,082	67	56,625	106,597	237,732
Totals, Leading Industries.....	224	2,706,278	840	435,450	1,587,483	2,754,487
Totals, All Industries.....	261	3,508,905	1,108	618,406	1,894,409	3,356,006

For footnotes see end of table, p. 440.

13.—Statistics of the Leading Industries of each of the Maritime Provinces, 1935 —concluded.

NOVA SCOTIA.

Industry.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products. ¹
	No.	\$	No.	\$	\$	\$
1 Primary iron and steel.....	6	19,233,969	1,630	2,161,043	4,481,459	7,987,949
2 Fish curing and packing.....	176	3,010,112	1,754	931,108	3,414,973	5,368,117
3 Central electric stations.....	76	30,926,072	838	924,419	Nil	5,096,453
4 Pulp and paper.....	5	12,354,017	754	927,194	1,398,885	4,331,670
5 Sawmills.....	572	1,592,368	1,747	465,212	1,269,760	2,276,841
6 Butter and cheese.....	30	1,168,992	280	277,907	1,339,355	2,120,922
7 Hosiery and knitted goods.....	3	2,308,705	662	477,204	964,468	1,916,899
8 Printing and publishing.....	34	1,953,216	665	803,976	308,200	1,847,287
9 Biscuits, confectionery, cocoa and chocolate.....	10	2,010,786	687	538,556	785,138	1,841,562
10 Shipbuilding and repairs.....	8	2,524,442	465	560,359	527,669	1,531,520
11 Castings and forgings.....	12	1,989,067	485	597,029	482,900	1,306,754
12 Bread and other bakery products	74	678,935	347	251,009	662,823	1,207,848
13 All other leading industries ²	6	20,344,154	1,422	1,789,095	9,843,471	17,392,276
Totals, Leading Industries.....	1,012	100,094,835	11,736	10,704,111	25,479,101	54,246,098
Totals, All Industries.....	1,350	118,999,064	16,060	14,042,674	31,647,800	67,109,172

NEW BRUNSWICK.

1 Pulp and paper.....	6	34,374,039	2,097	2,345,339	4,460,481	14,860,796
2 Sawmills.....	270	6,107,218	2,130	952,643	2,777,166	4,453,221
3 Central electric stations.....	38	32,309,810	472	480,397	Nil	3,233,679
4 Coffee, tea, and spices.....	5	2,093,986	262	289,995	2,022,012	2,803,886
5 Fish canning and curing.....	137	2,111,287	727	272,795	1,529,558	2,462,790
6 Biscuits, confectionery, cocoa and chocolate.....	7	1,642,199	555	389,464	760,947	1,503,170
7 Butter and cheese.....	33	932,476	203	181,327	842,914	1,282,759
8 Bread and other bakery products	88	785,504	389	269,351	648,431	1,274,811
9 Castings and forgings.....	10	2,023,536	448	459,048	318,494	1,176,533
10 Slaughtering and meat packing...	7	402,501	145	147,452	948,521	1,135,960
11 Printing and publishing.....	24	1,311,643	395	480,690	144,250	1,021,652
12 All other leading industries ²	6	14,434,481	2,546	2,517,867	6,253,038	9,891,731
Totals, Leading Industries.....	631	98,533,680	10,369	8,786,368	20,705,812	45,100,988
Totals, All Industries.....	872	115,635,568	13,937	11,680,095	25,551,371	56,344,190

¹ Net value is derived from gross value by deducting costs of materials, fuel, and electricity. Figures are not available for these individual industries.

² Individual statistics cannot be given because there are fewer than three establishments in each industry. Such industries are: in Prince Edward Island, castings and forgings, and sheet metal products; in Nova Scotia, petroleum products, sugar refineries, coke and gas products, wire and wire goods and cotton yarn and cloth; in New Brunswick, sugar refineries, railway rolling-stock, and cotton yarn and cloth.

Subsection 2.—The Manufactures of Quebec, 1935.

The pulp and paper mills of Quebec, the most important manufacturing unit of the province, produced goods with a selling value at the factory of \$78,701,994 in 1935. This exceeded by nearly \$31,000,000 the total value produced by central electric stations (\$47,808,550), the industry which ranked second in importance. This was followed by non-ferrous metal smelting and refining (\$45,565,844), cotton yarn and cloth (\$41,660,189), tobacco, cigars, and cigarettes (\$33,358,806), women's factory clothing (\$32,912,629), butter and cheese (\$27,625,840), petroleum products (\$23,157,263), men's factory clothing (\$22,686,491), and slaughtering and meat packing (\$22,087,549). A change took place in the ranking of some of the more important industries of the province. Non-ferrous metal products advanced from fourth to third place, petroleum products from ninth to eighth and men's factory clothing from tenth to ninth. Cotton yarn and cloth dropped from third to fourth place and slaughtering and meat packing from eighth to tenth.

The importance of the pulp and paper industry in Quebec is shown by comparison with the industry throughout Canada. The Quebec section of the industry, in addition to supplying about 10 p.c. of the total gross value of all products manufactured in the province, furnished 48 p.c. of the products of pulp and paper mills throughout the country. The gross value of cotton yarn and cloth products from Quebec mills formed 70 p.c., the value of railway rolling-stock 44 p.c., the value of tobacco, cigars, and cigarettes 85 p.c., and the value of boots and shoes 58 p.c. of the Dominion totals for these products. Thus, Quebec is an outstanding manufacturing province rather on account of her individual industries than because of the diversification of her industrial activity.

14.—Principal Statistics of the Leading² Industries of the Province of Quebec, 1935.

Industry.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products. ¹
	No.	\$	No.	\$	\$	\$
1 Pulp and paper.....	41	270,317,060	13,450	16,728,580	27,212,951	78,701,994
2 Central electric stations.....	135	643,826,223	3,716	5,391,621	Nil	47,808,550
3 Non-ferrous metal smelting.....	3	23,571,156	1,238	1,722,984	32,612,333	46,565,844
4 Cotton yarn and cloth.....	15	46,380,393	11,848	8,549,162	24,829,092	41,660,189
5 Tobacco, cigars, and cigarettes...	66	49,409,020	6,760	5,915,878	16,938,781	33,358,806
6 Clothing, women's, factory.....	312	12,979,513	10,475	8,327,938	19,688,226	32,912,629
7 Butter and cheese.....	1,234	15,119,000	4,522	3,303,607	21,338,616	27,625,840
8 Petroleum products.....	8	21,989,741	1,035	1,591,324	17,357,448	23,157,263
9 Clothing, men's, factory.....	113	9,566,002	4,843	4,366,194	13,313,516	22,686,491
10 Slaughtering and meat packing...	34	9,583,239	1,853	2,056,159	18,552,236	22,087,549
11 Boots and shoes, leather.....	126	13,283,259	10,136	6,824,680	11,276,912	20,954,632
12 Silk and artificial silk.....	22	23,639,442	7,100	5,627,454	8,043,862	19,329,540
13 Railway rolling-stock.....	11	37,556,898	7,272	8,235,112	9,275,356	18,040,841
14 Bread and other bakery products	934	11,360,034	5,081	4,157,189	7,702,987	15,354,214
15 Breweries.....	8	19,363,415	1,508	2,145,285	6,186,217	14,434,156
16 Hosiery and knitted goods.....	51	14,107,468	5,719	3,982,880	6,536,597	13,323,591
17 Electrical apparatus and supplies.	24	19,434,818	3,905	4,807,431	5,467,744	13,046,493
18 Printing and publishing.....	73	13,811,826	4,184	5,304,223	2,571,826	12,643,205
19 Flour-mills.....	223	5,390,990	752	792,346	10,260,899	12,271,911
20 Furnishing goods, men's.....	75	6,768,978	4,514	2,622,358	6,788,938	11,022,343
21 Biscuits, confectionery, cocoa, etc	52	8,333,614	3,001	2,379,372	5,625,368	10,963,751
22 Coke and gas products.....	5	13,177,446	809	1,242,146	3,127,230	10,176,569
23 Sawmills.....	1,365	10,111,001	4,762	2,097,161	5,494,211	9,860,342
24 Rubber goods, including footwear	12	10,215,430	2,745	2,164,637	3,266,794	9,444,001
25 Machinery.....	35	20,012,094	3,002	3,452,245	3,028,305	9,337,717
26 Sheet metal products.....	23	12,425,083	1,857	1,786,403	5,056,138	8,828,244
27 Printing and bookbinding.....	341	10,695,533	3,327	3,408,135	2,790,361	8,264,470
28 Paints, pigments and varnishes...	22	11,201,265	1,139	1,628,552	3,958,921	7,896,839
29 Castings and forgings.....	64	17,924,568	2,820	2,614,485	3,049,870	7,895,522
30 Distilleries.....	5	12,108,331	655	631,858	1,108,990	7,663,846
31 Coffee, tea, and spices.....	21	2,747,316	482	559,126	4,461,160	6,697,198
32 Medicinal and pharmaceutical preparations.....	61	7,475,151	1,244	1,569,440	2,130,543	6,424,875
33 Boxes and bags, paper.....	38	6,500,863	1,655	1,381,073	3,265,983	6,015,992
34 Aerated and mineral waters.....	122	4,946,744	1,118	1,086,345	1,662,379	5,980,017
35 Brass and copper products.....	26	7,653,114	1,162	1,237,568	3,929,071	5,960,998
36 Miscellaneous food products.....	37	3,534,443	649	693,772	2,234,111	5,758,697
37 Fur goods.....	113	4,773,718	1,253	1,268,953	3,723,530	5,644,809
38 Miscellaneous textile products.....	7	8,974,274	955	1,163,531	2,358,333	5,578,322
39 Fruit and vegetable preparations...	54	5,007,845	1,884	807,186	3,485,482	5,554,464
40 Hats and caps.....	68	2,590,999	1,834	1,525,168	2,358,369	4,909,312
Totals, Forty² Industries.....	5,979	1,447,867,307	145,764	135,149,561	332,069,686	674,842,066
Totals, All Industries.....	7,942	1,664,198,107	189,671	173,354,585	398,566,702	821,020,796
Percentages of above forty in- dustries to totals of all industries in the province.....	75.3	87.0	76.9	78.0	83.3	82.2

¹ See footnote 1 to Table 13.

² Statistics for sugar refining, which is also one of the leading industries of this province, cannot be published, since there are less than three establishments reporting.

Subsection 3.—The Manufactures of Ontario, 1935.

Ontario is the most important manufacturing province of the Dominion. The gross value of its manufactured products in 1935 represented about 51 p.c. of the total for the whole Dominion, while that of Quebec, the second province in importance in this respect, amounted to about 29 p.c. This premier position in manufacturing has been fairly uniformly maintained by Ontario over a long period, as the following percentages show: in 1926, 52 p.c.; 1918, 53 p.c.; 1910, 50 p.c.; 1900, 50 p.c.; 1890, 51 p.c.; and 1880, 51 p.c. Thus, in spite of the rapid industrial development in recent years in other provinces, such as Quebec, British Columbia, and Manitoba, Ontario is maintaining a manufacturing production roughly equal to that of the remainder of the Dominion.

The value of manufactured products totalled \$1,423,562,474 in 1935. In value of production, automobiles headed the list with an output valued at \$105,810,655. Other leading industries in the order of their importance were: non-ferrous metal smelting and refining \$105,035,029, slaughtering and meat packing \$56,932,181, central electric stations \$53,535,095, flour and feed mills \$51,760,071, pulp and paper \$51,041,765, electrical apparatus and supplies \$47,503,325, rubber goods including footwear \$46,466,350, and butter and cheese \$44,221,126. Some significant changes took place in the ranking of the leading industries. The automobile industry regained the dominant position held for several years prior to the depression and non-ferrous metal smelting and refining, which led all industries for the first time in 1934, dropped to second place. Central electric stations moved up from seventh to fourth place and electrical apparatus from ninth to seventh.

The turning point of the depression was reached in the summer of 1933. The increases in the latter part of the year, however, were not sufficiently pronounced to offset the losses of the beginning of the year. The result was that the principal statistics for 1933 were the lowest since 1929. Considerable improvement was reported for 1934 and again for 1935, although to a lesser degree in the latter year. Compared with 1934 there was in 1935 an increase of 8.4 p.c. in the number of employees, with a greater increase in the amount paid out in salaries and wages, namely, 12.1 p.c. The increase in the value of production was 13.4 p.c. and in the value added by manufacture 9.4 p.c.

The depression was particularly hard on industries producing capital or durable goods, and these constitute an important factor in the manufactures of Ontario. Thus, production was disproportionately curtailed in such important industries as automobiles, electrical equipment, machinery, agricultural implements, primary iron and steel, etc. This resulted not only in a drop in the rank of such industries within the province, but in a lowering of the manufacturing production of the whole province relatively to that of other provinces less affected by these influences. Since 1933, however, these industries in general have made a good recovery, and Ontario, which accounted for 48 p.c. of the gross value of all products manufactured in the Dominion in 1933, had by 1935 increased the relative value to 51 p.c.

Indicating the greater diversification of industry in Ontario as compared with Quebec, the percentages which the forty leading industries bore to the total manufactures of the province were higher in every particular in Quebec than in Ontario, especially in the capital employed and the number of establishments reporting. Outstanding among the industries in which the province of Ontario was pre-eminent, was that of automobile manufacturing, which was carried on practically in this province alone. Other important industries in which Ontario led, with the percentage

which the production of each bore to that of the Dominion in 1935, were as follows: agricultural implements, 96 p.c.; leather tanneries, 88 p.c.; rubber goods, 83 p.c.; furniture and upholstering, 63 p.c.; fruit and vegetable canning, preserving, etc., 68 p.c.; electrical apparatus and supplies, 78 p.c.; castings and forgings, 68 p.c.; primary iron and steel, 65 p.c.; slaughtering and meat packing, 43 p.c.; flour and feed mills, 53 p.c.; hosiery and knitted goods, 65 p.c.

15.—Principal Statistics of the Forty Leading Industries of the Province of Ontario, 1935.

Industry.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and Wages.	Cost of Materials Used.	Gross Value of Products. ¹
	No.	\$	No.	\$	\$	\$
1 Automobiles.....	14	39,682,410	12,805	18,362,764	75,360,767	105,810,655
2 Non-ferrous metal smelting.....	8	75,623,641	4,209	6,294,014	64,210,471	105,035,029
3 Slaughtering and meat packing...	56	25,926,152	4,091	5,097,613	46,333,415	56,932,181
4 Central electric stations.....	451	511,711,819	6,628	10,340,908	Nil	53,535,095
5 Flour and feed mills.....	641	23,933,336	2,808	2,423,682	42,340,378	51,760,071
6 Pulp and paper.....	36	171,500,472	8,655	11,941,503	20,635,693	51,041,765
7 Electrical apparatus and supplies..	134	55,448,550	11,454	12,595,146	19,681,797	47,503,325
8 Rubber goods, including footwear	31	53,183,433	8,255	8,836,236	16,980,950	46,466,350
9 Butter and cheese.....	973	26,230,831	6,604	6,594,643	30,010,225	44,221,126
10 Automobile supplies.....	62	22,871,741	6,458	7,263,348	18,351,048	32,278,008
11 Hosiery and knitted goods.....	96	32,288,148	11,641	9,455,540	14,877,304	30,030,875
12 Bread and other bakery products	1,220	20,402,304	9,527	8,327,093	13,324,372	29,204,032
13 Printing and publishing.....	298	23,087,276	7,425	10,602,477	5,922,152	27,072,537
14 Castings and forgings.....	167	36,427,049	9,045	9,436,464	9,614,587	26,209,691
15 Fruit and vegetable preparations.	151	26,875,484	4,654	3,091,295	14,602,082	25,971,236
16 Primary iron and steel.....	24	53,889,173	5,682	7,948,325	12,175,025	25,268,288
17 Petroleum products.....	14	21,661,413	2,055	3,026,101	19,440,932	25,121,188
18 Biscuits, confectionery, cocoa and chocolate.....	92	22,685,946	5,215	5,189,059	10,438,586	23,336,850
19 Machinery.....	147	37,444,498	5,564	6,657,008	8,795,587	22,449,725
20 Coke and gas products.....	23	55,219,123	2,479	3,387,657	8,857,312	21,543,651
21 Sheet metal products.....	68	25,005,530	3,877	4,139,412	10,556,922	19,342,338
22 Printing and bookbinding.....	516	21,100,143	6,269	7,404,927	6,724,245	18,435,605
23 Leather tanneries.....	31	20,200,090	3,356	3,412,425	11,559,737	18,128,743
24 Clothing, factory, women's.....	236	8,480,297	6,364	5,426,556	10,074,587	17,832,670
25 Breweries.....	30	19,293,030	1,661	2,249,599	5,352,164	14,879,017
26 Boxes and bags, paper.....	86	12,053,960	3,335	3,460,430	8,275,990	14,839,165
27 Cotton yarn and cloth.....	15	16,968,131	4,883	3,630,408	7,216,780	14,015,279
28 Woollen cloth.....	40	14,461,801	4,607	3,889,586	7,202,002	13,953,562
29 Acids, alkalies and salts.....	11	20,203,778	1,653	2,277,701	3,111,304	13,800,723
30 Boots and shoes, leather.....	72	9,768,114	5,243	4,528,288	7,436,870	13,751,113
31 Medicinal and pharmaceutical preparations.....	86	11,223,691	2,196	2,704,519	3,387,923	13,536,450
32 Agricultural implements.....	25	54,674,771	4,799	5,161,589	6,220,163	13,142,562
33 Clothing, factory, men's.....	43	6,068,179	4,040	4,319,239	6,679,779	12,801,594
34 Soaps, washing compounds, etc.....	48	9,878,184	1,276	1,703,166	7,137,941	12,169,468
35 Furniture.....	215	17,866,175	5,682	4,553,198	4,926,740	12,037,972
36 Brass and copper products.....	80	12,813,879	2,650	2,974,627	6,199,438	11,954,358
37 Sawmills.....	757	17,894,698	4,216	2,585,799	5,711,222	10,696,071
38 Hardware and tools.....	97	17,995,719	3,730	3,809,263	3,239,664	10,478,050
39 Paints, pigments and varnishes..	40	7,372,442	1,450	2,077,462	4,275,557	9,785,695
40 Foods, breakfast.....	14	4,863,297	610	724,270	3,214,907	9,412,059
Totals, Forty Leading Industries.....	7,148	1,664,278,708	207,151	227,903,340	581,456,618	1,125,784,372
Totals, All Industries.....	10,266	2,064,194,151	281,438	303,807,207	718,570,816	1,423,562,474
Percentages of the forty leading industries to totals of all industries in the province.....	69.6	80.6	73.6	74.9	80.9	79.1

¹ See footnote 1 to Table 13.

Subsection 4.—The Manufactures of the Prairie Provinces, 1935.

The slaughtering and meat packing industry in 1935 was outstanding among the manufactures of the Prairie Provinces when treated as a single unit. During 1935, as may be seen from Table 16, the gross value of production of this industry

was \$44,421,578 (Manitoba \$21,832,403, Saskatchewan \$6,500,945, and Alberta \$16,088,230). The second industry, from the point of view of gross value of production, was flour and feed mills with products valued at \$31,912,049 (Manitoba \$7,400,427, Saskatchewan \$12,785,321, and Alberta \$11,726,301). Butter and cheese comprised the third largest group, with an output valued at \$20,472,766, followed by central electric stations \$15,884,005, petroleum products \$14,774,603, railway rolling-stock \$12,099,233, etc.

The order of the leading industries is somewhat different in each province. In Manitoba the leading industries with their gross value of products in 1935 were as follows: slaughtering and meat packing \$21,832,403, railway rolling-stock \$9,264,003, butter and cheese \$7,602,065, flour and feed mills \$7,400,427, and central electric stations \$6,729,818. In Saskatchewan the leading industries were: flour and feed mills \$12,785,321, butter and cheese \$6,557,615, slaughtering and meat packing \$6,500,945, petroleum products \$5,683,815, and central electric stations \$4,377,205. In Alberta slaughtering and meat packing with an output of \$16,088,230 was the leading industry. This was followed by flour and feed mills with \$11,726,301, petroleum products \$7,791,296, butter and cheese \$6,313,086, and central electric stations \$4,776,982.

The importance of these industries, based mainly on such natural resources of the Prairie Provinces as grain-growing and cattle-raising areas, is evident.

16.—Principal Statistics of the Leading Industries of Manitoba, Saskatchewan, and Alberta, 1935.

MANITOBA.

Industry.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products. ¹
	No.	\$	No.	\$	\$	\$
1 Slaughtering and meat packing...	6	7,823,569	1,674	1,937,528	17,501,844	21,832,403
2 Railway rolling-stock.....	4	14,242,168	4,223	4,558,528	4,297,986	9,264,003
3 Butter and cheese.....	79	5,240,530	1,079	1,353,778	4,755,263	7,602,065
4 Flour and feed mills.....	38	5,133,255	491	469,827	6,065,455	7,400,427
5 Central electric stations.....	41	80,933,184	1,208	1,587,614	Nil	6,729,818
6 Printing and publishing.....	80	3,639,120	1,083	1,574,190	558,569	3,709,337
7 Printing and bookbinding.....	83	3,942,825	1,145	1,305,327	1,097,181	3,139,875
8 Bread and other bakery products.	140	2,980,845	1,028	899,724	1,493,109	3,024,618
9 Malt and malt products.....	4	2,943,280	109	211,038	1,819,515	2,907,106
10 Breweries.....	6	3,833,553	372	486,052	657,688	2,634,199
11 Bags, cotton and jute.....	5	1,814,317	229	257,758	2,081,657	2,620,072
12 Clothing, factory, women's.....	22	859,963	739	606,226	1,448,885	2,266,615
13 Furnishing goods, men's.....	16	1,162,068	802	569,351	1,488,110	2,245,359
14 Coffee, tea, and spices.....	8	1,481,237	148	193,230	1,649,520	2,159,016
15 Biscuits, confectionery, cocoa and chocolate.....	21	1,696,308	509	406,024	860,495	1,803,960
16 Dyeing, cleaning and laundry work.....	23	1,761,308	835	710,259	173,175	1,383,042
17 Petroleum products.....	4	500,080	67	70,318	975,766	1,299,492
18 Boxes and bags, paper.....	7	1,232,456	254	273,685	719,912	1,246,847
19 Fur goods.....	31	916,927	375	327,170	776,596	1,243,832
20 Paints, pigments and varnishes...	4	1,649,907	202	224,623	641,590	1,221,662
21 Coke and gas products.....	3	5,598,514	157	195,603	444,149	1,114,457
22 Mattresses and springs.....	4	1,061,325	284	303,101	569,794	1,112,174
23 Medicinal and pharmaceutical preparations.....	7	1,153,913	146	146,223	439,066	1,101,225
24 Primary iron and steel.....	4	1,723,715	304	375,631	268,644	1,040,316
Totals, Twenty-four Industries².....	640	153,324,367	17,463	19,042,808	50,783,879	90,101,920
Totals, All Industries.....	1,099	198,822,314	23,239	24,701,066	67,929,760	117,734,292

For footnotes see end of table, p. 445.

16.—Principal Statistics of the Leading Industries of Manitoba, Saskatchewan, and Alberta, 1935—concluded.

SASKATCHEWAN.

Industry.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products. ¹
	No.	\$	No.	\$	\$	\$
1 Flour and feed mills.....	80	13,556,885	579	620,246	9,320,684	12,785,321
2 Butter and cheese.....	74	3,554,338	801	826,508	4,367,932	6,557,615
3 Slaughtering and meat packing...	6	2,411,659	648	643,259	5,300,274	6,500,945
4 Petroleum.....	14	4,970,398	418	525,803	4,176,195	5,683,815
5 Central electric stations.....	125	25,576,944	552	785,384	Nil	4,377,205
6 Printing and publishing.....	126	2,521,132	826	1,080,606	417,008	2,302,508
7 Bread and other bakery products.	148	2,019,627	540	427,882	862,340	1,680,547
8 Breweries.....	9	3,244,737	248	289,138	576,284	1,597,636
9 Sawmills.....	121	680,764	468	179,932	277,280	625,177
10 Dyeing, cleaning and laundry work.....	15	779,183	256	190,298	59,614	412,874
Totals, Ten Industries².....	718	59,265,667	5,336	5,569,056	25,357,611	42,523,643
Totals, All Industries.....	880	66,271,171	6,355	6,524,411	28,046,921	46,821,302

ALBERTA.

Industry.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products. ¹
	No.	\$	No.	\$	\$	\$
1 Slaughtering and meat packing...	10	7,630,686	1,462	1,673,682	12,440,832	16,088,230
2 Flour and feed mills.....	88	7,595,661	677	737,575	8,774,013	11,726,301
3 Petroleum products.....	9	5,554,504	452	665,744	6,028,776	7,791,296
4 Butter and cheese.....	104	4,102,057	806	851,078	4,369,149	6,313,086
5 Central electric stations.....	76	27,103,959	578	841,770	Nil	4,776,982
6 Railway rolling-stock.....	3	6,733,906	1,505	1,588,896	1,145,486	2,835,230
7 Breweries.....	5	4,484,315	216	352,552	864,765	2,687,557
8 Printing and publishing.....	83	2,914,200	795	1,042,837	441,479	2,487,017
9 Bread and other bakery products.	151	1,986,331	661	570,272	1,169,073	2,382,226
10 Sawmills.....	190	1,540,670	1,054	425,118	465,092	1,198,640
11 All other leading industries ²	4	6,147,610	408	420,585	2,617,150	4,205,565
Totals, Above Industries².....	723	75,795,899	8,614	9,170,109	38,315,815	62,492,130
Totals, All Industries.....	1,002	96,322,781	12,087	12,504,449	42,831,636	73,282,607

¹ See footnote 1 to Table 13.

² Other leading industries, individual statistics of which cannot be given because there are fewer than three establishments in each industry, are: Manitoba and Saskatchewan, non-ferrous metal smelting and refining, and, in Alberta, sugar refining, wood preservation, and malt and malt products. The statistics of the three industries of Alberta are included under the heading "All other leading industries".

Subsection 5.—The Manufactures of British Columbia,* 1935.

British Columbia was, in 1935, the third most important manufacturing province in the Dominion, producing goods with a gross value of \$198,106,542. About 18 p.c. of this production, or \$35,713,189, is seen in Table 17 to be that of the sawmilling industry; the predominance of forest products industries in the industrial life of the province is still further emphasized if to this figure be added \$13,141,602, the value of the pulp and paper industry which ranks third. Second in importance among the industries of the province is that of fish curing and packing with a gross value of production of \$14,421,861. As previously stated, pulp and paper occupied third place, and this was followed by central electric stations with \$11,278,402, petroleum products \$9,229,363, and slaughtering and meat packing \$8,339,127.

* Including the Yukon Territory.

17.—Principal Statistics of the Leading Industries of British Columbia and the Yukon Territory, 1935.

Industry.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products. ¹
	No.	\$	No.	\$	\$	\$
1 Sawmills.....	257	36,737,170	10,788	10,723,066	19,394,227	35,713,189
2 Fish curing and packing.....	91	11,386,492	1,569	1,503,646	8,940,688	14,421,861
3 Pulp and paper.....	6	46,917,533	2,716	3,785,589	4,038,812	13,141,602
4 Central electric stations.....	87	106,272,532	1,407	2,108,530	Nil	11,278,402
5 Petroleum products.....	7	5,382,984	398	612,712	6,144,262	9,229,363
6 Slaughtering and meat packing.....	13	4,238,311	736	837,488	6,768,629	8,339,127
7 Fruit and vegetable preparations.....	48	4,347,073	1,191	824,550	3,267,508	5,130,120
8 Bread and other bakery products.....	279	3,472,842	1,548	1,437,426	2,400,188	5,114,001
9 Printing and publishing.....	71	4,221,807	1,420	2,090,275	813,315	4,576,770
10 Sheet metal products.....	16	6,434,911	430	505,806	2,689,949	4,184,413
11 Butter and cheese.....	34	1,680,842	404	462,677	2,551,003	3,677,086
12 Breweries.....	11	6,546,576	308	459,902	1,027,410	3,569,009
13 Coffee, tea, and spices.....	9	1,344,933	238	250,946	2,909,987	3,535,221
14 Planing mills, sash and door factories.....	48	2,261,706	879	734,533	1,498,495	2,699,863
15 Fertilizers.....	3	11,059,264	470	713,061	1,710,739	2,288,749
16 Coke and gas products.....	6	14,857,198	303	387,197	558,541	2,170,842
17 Dyeing, cleaning and laundry work.....	62	2,344,292	1,248	1,004,928	184,139	1,941,655
18 Foods, stock and poultry.....	30	1,136,241	256	243,672	1,457,557	1,912,685
19 Furniture.....	48	1,341,667	584	508,106	721,057	1,561,411
20 Printing and bookbinding.....	100	2,012,870	607	699,004	507,168	1,560,265
21 Boxes, wooden.....	20	1,344,743	582	471,956	875,766	1,525,173
22 Shipbuilding and repairs.....	15	6,587,784	591	720,889	337,279	1,432,310
23 Acids, alkalis and salts.....	3	1,116,703	43	59,207	25,652	1,216,844
24 All other leading industries ²	81	57,798,528	4,956	6,386,931	26,380,603	37,195,390
Totals, Above Industries².....	1,345	340,845,002	33,672	37,532,097	95,202,974	177,415,351
Totals, All Industries.....	1,819	371,039,792	38,979	43,094,011	105,845,738	198,106,542
Percentages of above industries to totals of all industries in the province.....	73.9	91.9	86.4	87.1	89.9	89.6

¹ See footnote 1 to Table 13.² In this group, individual statistics cannot be published, because there are fewer than three establishments in each industry. Such industries are: biscuits, confectionery, cocoa and chocolate; distilleries; sugar refineries; castings and forgings; non-ferrous metal smelting and refining; explosives, ammunition and fireworks; and paints, pigments and varnishes.

Section 4.—Principal Factors in Manufacturing Production.

Subsection 1.—Capital Employed.

The remarkable increase in capital employed in Canadian manufactures from the beginning of the twentieth century denotes rapid growth in industrial operations. From 1900 to 1905 the capital increased from \$446,900,000 to \$833,900,000, and advanced to \$1,958,700,000 in 1915. During this period returns were received from establishments with 5 hands or over, and, while the rise in wholesale prices did not exceed 37 p.c., the capital employed in manufactures increased nearly 340 p.c.

The capital investment in 1935 in all establishments, irrespective of the number of employees, was \$4,698,991,853 as compared with \$4,703,917,730 in 1934 and with \$2,696,154,030 in 1917, an increase of 75 p.c. in 18 years.

The provincial distribution of the manufactures of Canada may be illustrated by the investment of capital. Capital employed in Ontario in 1917 was 48.3 p.c. of the total, 52.4 p.c. in 1923, and 44.0 p.c. in 1935. The percentages employed in the plants of Quebec were: 29.4 in 1917, 29.5 in 1924, and 35.4 in 1935. British Columbia held third place in 1935 with a capital investment of 7.9 p.c. of the total,

while Manitoba, Nova Scotia, New Brunswick, Alberta, and Saskatchewan followed in the order named, with proportions varying between 4.2 p.c. and 1.4 p.c. (Table 18.)

From a survey of the industrial groups in which the capital of the country is invested, it appears that the central electric stations industry led again in 1935, with an investment of 31.1 p.c. of the total. The wood and paper group was second with 18.6 p.c., the iron and its products group third with 11.8 p.c. and the vegetable products group fourth with 10.6 p.c. Up to 1930, the wood and paper group had been first since 1919 in capital invested, but since 1931 the central electric stations group has assumed the premier position.

The statistics of capital employed in the manufacturing industries are of interest in deducing the proportions of fixed and liquid assets. In 1923, land, buildings, machinery, and tools constituted 64 p.c. of the total capital, while in 1929 the proportion had increased to 66 p.c. and in 1935 to 74 p.c. The fixed assets amounted to \$3,485,074,067 in 1935, while current assets, including inventories of raw materials and finished products, bills and accounts receivable, cash, and sundries, were valued at \$1,213,917,786. Details by provinces and industrial groups are given in Table 19.

18.—Distribution of Capital Employed in the Manufacturing Industries of Canada, in Percentages, by Provinces and Industrial Groups, Representative Years 1917-35.

Province or Group.	1917.	1920.	1926.	1929.	1933.	1934.	1935.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
PROVINCE.							
Prince Edward Island.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nova Scotia.....	4.8	4.2	3.0	2.7	2.6	2.5	2.5
New Brunswick.....	2.4	3.1	2.4	2.3	2.6	2.6	2.5
Quebec.....	29.4	30.5	30.6	32.9	35.2	35.7	35.4
Ontario.....	48.3	49.5	49.8	47.6	44.5	43.9	44.0
Manitoba.....	3.5	3.4	3.2	3.4	3.8	3.9	4.2
Saskatchewan.....	1.1	0.9	0.8	1.1	1.4	1.4	1.4
Alberta.....	2.3	1.8	1.8	2.1	2.1	2.1	2.0
British Columbia and Yukon.....	8.1	6.5	8.3	7.8	7.7	7.8	7.9
Totals.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
INDUSTRIAL GROUP.							
Vegetable products.....	10.2	11.7	11.3	11.2	10.9	10.8	10.6
Animal products.....	7.7	6.6	5.6	4.8	4.3	4.5	4.5
Textiles and textile products.....	7.3	9.0	8.0	7.5	6.9	7.0	7.0
Wood and paper products.....	19.9	22.9	23.3	22.7	19.0	18.8	18.6
Iron and its products.....	23.5	19.1	15.0	14.8	12.4	11.7	11.8
Non-ferrous metal products.....	2.6	3.3	5.1	5.9	5.7	5.6	5.6
Non-metallic mineral products.....	5.6	6.5	6.6	6.5	6.6	6.5	6.4
Chemicals and allied products.....	6.5	3.6	3.3	3.3	3.3	3.3	3.1
Miscellaneous industries.....	3.5	4.0	2.8	2.5	1.4	1.4	1.3
Central electric stations.....	13.2	13.3	19.0	20.8	29.5	30.4	31.1

19.—Forms of Capital Employed in the Manufacturing Industries of Canada, by Provinces and by Groups of Industries, 1935, and Totals for Representative Years 1923-35.

Province or Group and Year.	Establishments.	Fixed Capital.	Working Capital.			Total Capital.
		Land, Buildings, Fixtures, Machinery, Tools and other Equipment.	Inventory Value of Raw Materials and Finished Products on Hand, Stocks in Process, Fuel, Supplies, etc.	Cash, Bills and Accounts Receivable, Prepaid Expenses, etc.		
	No.	\$	\$	\$	\$	
Totals, 1923	22,642	2,165,497,811	655,775,934	559,049,205	3,380,322,950	
Totals, 1924	22,178	2,310,298,012	677,168,191	551,347,257	3,538,813,460	
Totals, 1926	22,708	2,626,963,690	722,451,467	632,154,433	3,981,569,590	
Totals, 1927	22,936	2,866,366,199	773,824,436	697,440,923	4,337,631,558	
Totals, 1929	23,597	3,377,590,099	878,783,691	826,640,964	5,083,014,754	
Totals, 1930	24,020	3,584,344,724	848,927,120	770,044,916	5,203,316,760	
Totals, 1931	24,501	3,526,611,580	721,537,778	713,163,050	4,961,312,408	
Totals, 1932	24,544	3,511,904,606	608,951,917	620,399,087	4,741,255,610	
Totals, 1933	25,232	3,482,675,723	583,891,968	622,806,613	4,689,373,704	
Totals, 1934	25,663	3,489,235,519	608,069,883	606,612,328	4,703,917,730	
PROVINCE.						
Prince Edward Island.....	261	2,489,254	469,181	550,470	3,508,905	
Nova Scotia.....	1,350	88,943,991	16,933,918	13,121,155	118,999,064	
New Brunswick.....	872	89,971,347	13,704,489	11,959,732	115,635,568	
Quebec.....	7,942	1,300,535,330	181,724,529	181,938,248	1,664,198,107	
Ontario.....	10,266	1,450,701,837	310,242,172	303,250,142	2,064,194,151	
Manitoba.....	1,099	158,262,388	21,241,973	19,317,953	198,822,314	
Saskatchewan.....	880	46,879,981	9,886,951	9,504,239	66,271,171	
Alberta.....	1,002	72,319,740	15,288,166	8,714,875	96,322,781	
British Columbia and Yukon.....	1,819	274,970,199	51,062,932	45,006,661	371,039,792	
Totals, 1935	25,491	3,485,074,067	620,554,311	593,363,475	4,698,991,853	
INDUSTRIAL GROUP.						
Vegetable products.....	5,402	261,650,130	134,287,937	100,318,418	496,256,485	
Animal products.....	4,402	123,729,384	50,626,520	37,316,604	211,672,508	
Textiles and textile products.....	2,275	191,604,127	72,311,683	65,281,444	329,197,254	
Wood and paper products.....	8,186	675,959,651	97,859,147	99,938,151	873,756,949	
Iron and its products.....	1,249	332,484,430	110,929,892	111,730,145	555,144,467	
Non-ferrous metal products.....	505	161,424,268	53,624,774	46,576,925	261,625,997	
Non-metallic mineral products.....	1,188	223,966,512	51,684,834	24,804,879	300,455,725	
Chemicals and chemical products....	734	86,849,923	30,214,529	30,408,082	147,472,534	
Miscellaneous industries.....	509	42,802,013	9,754,053	11,032,730	63,588,796	
Central electric stations.....	1,041	1,384,603,529	9,261,442	65,956,097	1,459,821,198	

Subsection 2.—Employment in Manufactures.

The total number of persons engaged in those manufacturing industries of Canada for which statistics were obtained in 1935 was in that year 582,874, as compared with 493,903 in the same industries in 1933 and 694,434 in 1929. The 1935 employees included 105,579 salaried employees, this figure being obtained from the manufacturers at the end of the year, and 477,295 wage-earners, the average number employed as derived from the manufacturers' records of the numbers on the pay-rolls on the 15th of each of the twelve months. Prior to 1925, the number of wage-earners was computed as the sum of the number recorded each month divided by 12 whether the establishment was operating the 12 months or not. Beginning with the statistics for 1925, in seasonal industries which are in operation only a limited number of months in each year, such as sawmilling, fruit and vegetable canning, etc., the average was computed by dividing the sum of the wage-earners reported on the 15th of each month by the number of months in operation. This change of method increased the apparent number of employees, not only in seasonal industries

but also in the groups containing such seasonal industries and in provincial and Dominion totals. Consequently, the change of method had a reducing influence on apparent average wages and on all other averages per wage-earner and per employee. In 1931, however, the old method of computing the average number of wage-earners was again adopted. A change was also made in the compilation of the number of salaried employees. Prior to 1931, owners who were working as ordinary wage-earners, such as small bakers, reported themselves as wage-earners. In 1931, however, all such owners were required to report themselves as salaried employees. In 1931, also, travelling salesmen who were attached to the plant and devoted all or the greater part of their time in selling the products of that plant were included with salaried employees. Prior to this they were not reported at all. These changes, therefore, explain the apparent increase in the number of salaried employees in 1931 as compared with the previous year; actually there was a decrease, this apparent increase being attributable in part to a decrease in the number of wage-earners.

The number of salaried employees and of wage-earners, as thus ascertained, is given for each of the years since 1917, the year of the first annual census of manufacturing production, in Table 20. Then, taking the percentages of the wage-earners and the total employees in each year to those of 1917, and dividing these percentages into the volume of manufacturing production in each year (see p. 415 for the index of volume), the quotients give tentative conclusions regarding the efficiency of production per wage-earner and per employee in years subsequent to 1917, as compared with that year. Since central electric stations were excluded in computing the index of the volume of production, employees in these establishments have been excluded also in computing the percentages relative to 1917 for both wage-earners and total employees, and consequently from the indexes of efficiency of production. These indexes of the efficiency of production are, of course, affected by the changes in the method of computing the number of employees adopted in 1925 and then again in 1931. Inasmuch as the change increased the apparent number of employees between 1925 and 1930, it proportionately decreased the index of the efficiency of production. The table illustrates the development of modern industry which has accomplished a large increase in production with a comparatively small increase in wage-earners, by better organization and the use of improved equipment. Capital invested in manufacturing industries, exclusive of central electric stations, has increased by 38·0 p.c. from 1917 to 1935, compared with a decrease of 14·5 p.c. in wage-earners, while the horse-power used per wage-earner has increased from about 3 in 1917 to 9 in 1935. The factor of better organization is not susceptible of measurement. However, salaried employees have increased 52 p.c. since 1917, or more nearly in proportion to the growth in production than wage-earners. The result of these developments has been the increase of 59·5 p.c. in the volume of production per wage-earner and a smaller increase of 47·3 p.c. per employee, owing to the increased proportion of salaried employees in the total. The indexes may be considered as supplying satisfactory evidence of a general gain in volume of production per person employed. In this connection it should be remembered, however, that in 1917, owing to the large numbers overseas, many persons of low efficiency were being employed, their inefficiency being concealed at the time by the prevailing inflation of prices; it is possible that the sudden rise in the indexes of efficiency in 1921 and 1922 may be partly accounted for by their elimination in the contraction of industrial operations which occurred at that time. During the recent depression years the reduced volume of production lowered the indexes of efficiency.

Statistics of employment in manufacturing industries during 1935, derived from the Census of Manufactures, are shown in Table 24. According to these statistics, the 25,491 establishments covered, employed 105,579 salaried employees and 477,295 wage-earners, a total of 582,874 persons. Out of every 1,000 persons employed in manufacturing, 181 were classed as salary earners and 819 as wage-earners; the former earned 29 p.c. and the latter 71 p.c. of the total amount paid out as remuneration for services.

20.—Salaried Employees and Wage-Earners in the Manufacturing Industries of Canada, with Volume of Manufacturing Production and Comparative Efficiency of Production, 1917-35.

NOTE.—Employees of central electric stations are excluded in this table since factors of production and efficiency for that industry are not representative and would vitiate the result.

Year.	Salaried Employees.	Wage-Earners.	Total Employees.	Percentages Relative to 1917.		Index Number of Volume of Mfd. Products.	Indexes of Efficiency of Production.	
				Of Wage-Earners.	Of Total Employees.		Per Wage-Earner.	Per Employee.
	No.	No.	No.	p.c.	p.c.			
1917.....	65,380	547,467	612,847	100.0	100.0	100.0	100.0	100.0
1918.....	66,733	541,931	608,664	99.0	99.3	102.0	103.0	103.2
1919.....	77,125	524,122	601,247	95.7	98.1	98.1	102.5	100.0
1920.....	78,334	520,559	598,893	95.1	97.7	95.0	99.9	97.2
1921.....	70,253	375,109	445,362	68.5	72.6	86.1	125.6	118.6
1922.....	71,586	392,160	463,746	71.6	75.6	96.0	134.1	127.0
1923.....	73,374	440,798	514,172	80.5	83.9	104.8	130.2	124.9
1924.....	70,671	425,004	495,675	77.6	80.8	102.9	132.7	127.3
1925.....	71,897	459,065	530,962	83.8	86.6	112.7	134.5	130.1
1926.....	75,990	492,143	568,133	89.9	92.7	128.1	142.5	138.2
1927.....	79,474	524,751	604,225	95.8	98.6	136.5	142.5	138.5
1928.....	85,029	557,139	642,168	101.7	104.7	148.8	146.3	142.0
1929.....	89,795	588,477	678,270	107.5	110.6	157.5	146.6	142.4
1930.....	85,778	540,803	626,581	98.8	102.2	142.8	144.5	139.7
1931.....	92,780	447,632	540,412	81.7	88.2	124.1	151.9	140.7
1932.....	88,434	391,569	480,003	71.5	78.3	105.0	146.9	134.1
1933.....	87,985	391,201	479,186	71.4	78.2	105.1	147.2	134.4
1934.....	93,442	436,746	530,188	79.8	86.5	123.7	155.0	143.0
1935.....	99,339	468,077	567,416	85.5	92.6	136.4	159.5	147.3

Distribution of Employees in 1935.—An analysis of the returns by provinces shows that 53,989 or 51.1 p.c. of all the employees on salaries were employed in Ontario; of this number 40,649 were males and 13,340 were females. The province of Quebec with 30,656 persons or 29 p.c. of the total, recorded the second largest number of salaried workers; of these 24,246 were males and 6,410 females. British Columbia ranked third with 6,484 or 6.2 p.c. of the total salaried employees.

Of the wage-earners employed numbering 477,295, 47.6 p.c. were employed in Ontario, 33.3 p.c. in Quebec and 6.8 p.c. in British Columbia. It is interesting to note that out of every 1,000 salaried employees 223 were females, while in the case of wage-earners 232 out of every 1,000 were females.

The wood and paper industries, with 24,892 salaried employees, reported a larger number than any other group, having 23.6 p.c. of the total. The vegetable products group came next with 16,089 salaried employees or 15.2 p.c. of the total. The textile industries gave employment to a proportionately greater number of female salaried employees than any other group. Out of every 1,000 salaried employees in this group 319 were females, as compared with only 209 for all the other groups.

In the number of wage-earners employed, the textile industries came first with 107,594 or 22.5 p.c. of the total. This was followed by the wood and paper products group, with 98,832 wage-earners or 20.7 p.c. of the total. It is also of interest to

note that out of every 1,000 wage-earners in the textile industries 550 were females, while in all the other groups 139 were females. The importance of the textile industries in providing employment to females is strikingly illustrated by the fact that out of all female employees engaged in the manufacturing industries of Canada, 47.3 p.c. were found in the textile group.

21.—Percentages of Male and Female Employees on Salaries and Wages and Percentages of Total Salaries and Wages, by Provinces and Groups of Industries, 1935.

NOTE.—For actual figures upon which this table is based, see Table 24.

Province or Group.	Employees on Salaries.			Salaries.	Employees on Wages.			Wages.
	Male.	Female.	Total.		Male.	Female.	Total.	
PROVINCE.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Prince Edward Island.....	0.3	0.1	0.2	0.1	0.1	0.2	0.2	0.1
Nova Scotia.....	2.4	2.1	2.3	1.9	3.1	2.1	2.9	2.6
New Brunswick.....	2.1	1.8	2.0	1.8	2.7	1.8	2.5	2.1
Quebec.....	29.5	27.2	29.0	29.2	30.5	42.5	33.3	29.4
Ontario.....	49.5	56.7	51.1	52.9	48.4	45.9	47.6	50.9
Manitoba.....	4.7	4.0	4.5	4.3	4.1	3.1	3.9	4.2
Saskatchewan.....	2.1	1.3	2.0	1.5	1.0	0.3	0.9	0.9
Alberta.....	2.9	1.9	2.7	2.3	2.2	1.0	1.9	2.0
British Columbia and Yukon	6.5	4.9	6.2	6.0	7.9	3.1	6.8	7.8
Totals.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
INDUSTRIAL GROUP.								
Vegetable products.....	15.6	14.1	15.2	14.7	12.0	17.4	13.2	11.9
Animal products.....	10.2	8.7	9.9	8.5	10.7	9.6	10.4	9.4
Textiles and textile products	10.9	17.7	12.4	12.4	13.2	53.5	22.5	18.0
Wood and paper products....	24.4	20.7	23.6	22.6	24.4	8.4	20.7	21.4
Iron and its products.....	13.4	12.1	13.1	14.4	21.4	2.7	17.1	20.5
Non-ferrous metal products..	6.3	7.0	6.4	7.2	6.2	3.7	5.6	6.7
Non-metallic mineral products.....	4.9	3.8	4.7	4.7	4.9	0.5	3.9	4.6
Chemicals and allied products.....	6.1	8.0	6.5	7.1	2.5	2.5	2.5	2.7
Miscellaneous industries.....	2.2	2.4	2.3	2.3	2.2	1.7	2.1	2.0
Central electric stations.....	6.0	5.5	5.9	6.1	2.5	Nil	2.0	2.8

Monthly Record of Employment in Manufactures.—A monthly record of the number of wage-earners employed in Canadian manufactures, as compiled from the Census of Industry, is given in Table 22 for representative years 1922 to 1935 and by sex for certain of the years. Ordinarily, manufacturing employment in Canada reaches its highest point during the summer months. Some of the seasonal industries, such as canning, are most active then, textile industries are preparing winter goods and industry generally feels the active demand of the agricultural purchasing power resulting from the prospects of the season's harvest. In 1929, however, the rising tide of "good times" was checked about midsummer and then the recession set in during the autumn with the stock market crash. Employment during 1930, 1931, 1932 and the first half of 1933 declined steadily, the monthly employment figures in each case being lower than the corresponding month of the previous year. The peak of employment was reached in June, 1929, when 596,544 wage-earners were on the payrolls. This compares with the peak month in 1930 of 556,386 wage-earners, 484,661 in 1931, 417,685 in 1932, 429,018 in 1933, 462,444 in 1934, and 496,510 in 1935. In July, 1933, employment took an upward swing; for the first time since 1929 the number of wage-earners on the payroll was higher than that for the corresponding month of the previous year. The improvement has been generally maintained since then.

22.—Total Numbers of Wage-Earners Employed in the Manufacturing Industries of Canada, by Months and by Sex, for Representative Years 1922-35.

TOTALS OF WAGE-EARNERS.

Month.	1922.	1926.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
January.....	330,487	432,139	521,227	510,061	442,547	390,249	356,792	393,819	423,570
February.....	342,959	445,179	537,816	517,562	455,811	400,680	363,902	410,610	439,011
March.....	355,340	459,554	555,908	527,966	468,222	408,353	372,782	424,270	448,586
April.....	366,478	473,088	575,269	537,110	476,132	409,860	376,120	435,534	459,294
May.....	388,734	494,156	594,969	556,386	484,661	417,685	395,294	458,032	477,722
June.....	400,165	507,889	596,544	552,166	476,692	414,536	410,195	462,444	484,733
July.....	397,416	510,887	594,879	539,354	463,694	397,372	411,658	451,101	482,174
August.....	395,741	505,917	588,509	529,403	456,783	394,277	420,431	454,076	482,844
September.....	398,653	506,917	586,439	530,130	460,081	401,534	429,018	459,341	496,510
October.....	391,492	503,679	574,566	512,215	434,556	396,253	423,547	453,278	496,205
November.....	385,222	484,400	547,697	486,926	430,618	385,460	413,664	442,625	486,431
December.....	373,954	465,248	519,331	464,086	417,367	364,216	397,408	426,553	470,273

WAGE-EARNERS BY SEX.

Month.	1922.		1929.		1933.		1934.		1935.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
January.....	249,912	80,575	409,663	111,564	268,855	87,937	298,816	95,003	324,154	99,416
February.....	259,408	83,551	422,912	114,904	271,534	82,368	309,556	101,054	335,615	103,396
March.....	270,079	85,261	439,106	116,802	278,779	94,003	320,719	103,551	343,707	104,879
April.....	281,051	85,427	456,326	118,943	283,088	93,032	331,049	104,485	353,456	105,838
May.....	300,325	88,409	473,017	121,952	297,715	97,579	348,399	109,633	367,468	110,254
June.....	310,625	89,540	474,157	122,387	309,263	100,932	353,075	109,369	373,999	110,734
July.....	310,250	87,166	473,261	121,618	312,835	98,823	348,215	102,886	375,118	107,056
August.....	307,464	88,277	464,087	124,422	315,461	104,070	345,834	108,242	369,868	112,976
September.....	305,148	93,505	455,918	130,521	317,299	111,719	343,155	116,186	373,692	122,818
October.....	298,203	93,289	446,752	127,814	313,541	110,006	340,285	112,993	376,015	120,190
November.....	292,741	92,481	425,729	121,968	306,768	106,896	333,780	108,845	369,253	117,178
December.....	284,084	89,870	404,700	114,631	297,088	100,320	323,423	103,130	359,636	110,637

Hours Worked by Wage-Earners.—The number of wage-earners working specified numbers of hours per week in the month of highest employment in 1932 to 1935 and in detail by provinces, industrial groups and in the forty leading industries for 1935 is shown in Table 23. An explanation should be made of the term "month of highest employment" as used in connection with this table. Each firm is required to report the number of hours per week worked by its wage-earners during the month in which the greatest number were employed. It therefore happens that, in the case of one firm, the month of highest employment might be May, while in that of another firm October might be the month of highest employment. The month of highest employment as shown in the following table, therefore, does not refer to any particular month but represents the summation of the different months of highest employment as reported by all firms. For a given industry, however, the month of highest employment is of more significance, as in this case it coincides for a great number of the firms engaged in the same industry.

Average hours worked per week in 1935 for all industries totalled 48·7 as compared with 49·1 hours in 1934, 48·2 hours in 1933, and 48·5 hours in 1932. The number of hours worked per week is affected both by business conditions and by changes due to government legislation and union demands. In times of depression the average number of hours per week is reduced, due to the policy of some employers of spreading the available work over as many employees as possible. With the return of better times the number of hours worked by each employee is naturally increased. This increase is, however, offset by the reduction in hours through legislative enactments and union agreements. As a result of these two factors, the tendency in employment, over a short period of time at least, cannot be ascertained directly from the statistics given in the tables following.

For Canada as a whole, 36 p.c. of the wage-earners worked under 48 hours in 1935, 23 p.c. worked 48 hours, 19 p.c. worked between 49 and 54 hours, while 22 p.c. worked 55 hours or over.

23.—Wage-Earners Working Specified Numbers of Hours in the Month of Highest Employment from 1932 to 1935 and in Detail by Provinces, Groups, and the Forty Leading Industries, 1935.

NOTE.—These are the regular hours worked per week and do not, therefore, include overtime.

Province or Group.	40 Hours or Less.	41-43 Hours.	44 Hours.	45-47 Hours.	48 Hours.	49-50 Hours.	51-53 Hours.	54 Hours.	55 Hours.	56-59 Hours.	60 Hours or Over.	Grand Total of Workers.	Average Hours Worked per Week.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
PROVINCE.													
Prince Edward Island.....	256	5	126	82	539	8	33	367	12	49	533	2,010	51.9
Nova Scotia.....	1,449	156	1,194	1,698	3,177	1,464	649	1,798	668	3,208	4,218	19,679	50.9
New Brunswick.....	2,026	233	1,542	1,145	2,741	1,600	556	2,145	190	1,931	4,158	17,267	52.4
Quebec.....	21,968	4,101	20,686	10,490	40,557	19,766	7,850	6,283	28,913	6,808	25,203	192,625	50.0
Ontario.....	33,811	6,076	43,695	28,449	61,912	39,421	9,768	11,842	13,226	8,352	21,630	278,182	48.0
Manitoba.....	5,729	377	5,410	1,558	3,895	1,465	397	837	236	439	1,345	21,688	45.0
Saskatchewan.....	645	68	601	296	1,474	221	103	433	78	371	1,085	5,375	50.6
Alberta.....	2,219	254	1,823	609	2,931	407	248	959	89	139	1,725	11,403	48.0
British Columbia and Yukon.....	7,612	735	7,275	1,392	20,152	457	495	2,882	123	582	953	42,658	45.8
Totals, 1935.....	75,715	12,005	81,352	45,719	137,378	64,809	20,099	27,546	43,535	21,879	60,850	590,887	48.7
INDUSTRIAL GROUP.													
Vegetable products.....	12,640	3,129	7,961	8,136	13,113	9,136	3,181	8,506	5,442	4,186	13,019	88,449	49.6
Animal products ¹	3,232	695	5,292	3,023	11,046	7,725	2,375	4,265	5,104	1,713	4,299	48,769	50.0
Textiles and textile products.....	6,994	1,569	24,322	9,298	20,903	24,120	6,457	2,556	23,894	2,528	3,037	125,408	48.8
Wood and paper products.....	8,225	1,957	13,357	6,799	47,669	6,430	9,229	5,866	3,443	3,060	30,656	133,291	51.5
Iron and its products.....	27,662	2,408	14,274	9,194	17,591	10,547	3,446	2,091	3,790	3,783	3,693	98,479	45.1
Non-ferrous metal products.....	6,018	1,178	4,855	5,121	11,627	1,788	405	421	415	810	1,122	32,860	45.8
Non-metallic mineral products.....	4,989	1,147	2,887	640	5,491	1,501	380	1,925	715	1,423	2,829	23,607	48.0
Chemicals and chemical products.....	2,720	727	3,027	1,893	3,040	1,321	206	344	221	433	580	14,512	45.6
Miscellaneous industries.....	1,364	150	3,756	1,527	2,971	1,354	219	800	406	242	565	13,354	46.9
Central electric stations.....	1,891	45	1,821	158	3,927	887	601	972	105	701	1,050	12,158	48.2

¹ Exclusive of dairy factories.

23.—Wage-Earners Working Specified Numbers of Hours in the Month of Highest Employment from 1922 to 1935 and in Detail by Provinces, Groups, and the Forty Leading Industries, 1935—concluded.

Industry.	40 Hours or Less.	41-43 Hours.	44 Hours.	45-47 Hours.	48 Hours.	49-50 Hours.	51-53 Hours.	54 Hours.	55 Hours.	56-59 Hours.	60 Hours or Over.	Grand Total of Workers.	Average Hours Worked per Week.
1 Non-ferrous metal smelting and refining.	2,801	9	343	546	4,646	Nil	Nil	225	Nil	475	650	9,698	45.7
2 Pulp and paper.	2,537	605	642	361	15,894	680	1,102	1,146	337	337	3,308	27,581	49.6
3 Central electric stations.	1,891	45	1,821	158	3,927	887	601	972	105	1,050	1,558	12,158	48.2
4 Slaughtering and meat packing.	3,508	284	3,01	830	2,980	1,201	685	763	682	367	539	9,140	49.7
5 Automobiles.	5,441	83	3,514	254	3,718	88	359	74	1	140	155	13,887	42.3
6 Butter and cheese.	1	1	1	1	1	1	1	1	1	1	1	1	1
7 Flour and feed mills.	237	18	181	18	1,579	45	43	375	343	107	1,316	4,262	53.7
8 Petroleum products.	3,358	36	157	20	619	21	14	62	13	8	117	4,425	40.1
9 Sawmills.	1,625	99	533	335	11,312	581	470	2,482	541	3,064	23,645	43,687	58.1
10 Electrical apparatus and supplies.	1,797	94	2,376	3,237	5,468	720	101	118	210	214	249	14,584	45.9
11 Bread and other bakery products.	719	99	632	158	3,162	985	883	4,685	738	1,724	2,784	16,579	53.4
12 Cotton yarn and cloth.	148	86	413	369	2,794	3,894	806	13	11	104	452	20,722	53.1
13 Rubber goods, including footwear.	1,745	465	413	1,310	1,327	264	161	1,228	512	1,993	434	10,684	47.9
14 Printing and publishing.	1,241	556	1,730	1,416	4,090	264	161	1,228	512	1,993	434	9,748	45.4
15 Clothing, factory, women's.	992	88	8,805	1,601	5,949	1,713	167	124	129	143	133	19,843	45.5
16 Hosiery and knitted goods.	401	88	1,310	2,734	2,842	6,053	1,176	187	3,784	143	216	18,934	49.6
17 Railway rolling-stock.	14,159	572	429	1,796	707	92	44	33	54	109	67	18,062	37.5
18 Biscuits, confectionery, cocoa, etc.	440	578	680	2,166	1,641	1,537	325	891	1,016	194	321	9,780	48.8
19 Breweries.	327	22	701	215	377	772	127	63	290	198	642	3,784	50.5
20 Tobacco, cigars, and cigarettes.	1,823	860	1,522	596	231	1,779	57	58	113	86	54	6,673	44.4
21 Castings and forgings.	1,868	474	1,848	1,399	2,167	2,353	591	1,099	859	379	1,135	14,192	48.3
22 Primary iron and steel.	1,135	163	540	1,131	3,812	601	425	194	516	2,160	353	11,030	49.2
23 Coke and gas products.	3,309	84	288	86	987	169	129	172	13	421	328	2,996	49.9
24 Fruit and vegetable preparations.	5,784	769	752	2,524	723	983	609	825	1,908	1,091	5,880	21,860	50.1
25 Sugar refineries.	522	30	11	18	1,101	17	31	75	17	61	1,022	2,905	52.0
26 Clothing, factory, men's.	81	52	6,525	224	853	370	62	128	201	Nil	Nil	8,496	45.1
27 Boots and shoes, leather.	1,040	193	1,897	1,197	3,355	4,063	815	1,100	2,815	840	486	16,802	52.1
28 Sheet metal products.	497	141	1,897	399	1,488	579	213	54	422	579	350	6,199	49.9
29 Printing and bookbinding.	602	156	3,236	836	5,252	282	40	25	92	102	24	10,558	46.0
30 Machinery.	702	109	2,258	531	905	1,992	818	107	225	162	328	8,134	47.5
31 Automobile supplies.	1,427	230	625	846	1,594	555	687	179	383	78	487	7,091	46.9
32 Silk and artificial silk.	102	102	59	118	1,433	2,012	1,844	60	2,858	1,174	209	10,061	52.4
33 Coffee, tea, and spices.	48	16	504	471	1,382	41	16	22	3	14	1	1,518	45.9
34 Boxes and bags, paper.	174	60	893	722	1,651	1,450	96	72	73	91	125	5,349	47.8
35 Fish canning and curing.	1,261	58	142	93	2,288	178	157	1,542	84	311	2,889	9,003	53.0
36 Furnishing goods, men's.	1,355	199	2,318	1,241	1,029	1,573	441	412	496	18	6	9,088	45.8
37 Medicinal and pharmaceutical preparations.	238	81	736	937	252	175	20	5	Nil	1	7	2,452	44.8
38 Leather tanneries.	54	27	585	256	578	1,142	17	460	770	33	186	4,108	50.4
39 Paints, pigments and varnishes.	314	19	542	323	273	32	32	3	14	29	39	1,909	50.2
40 Woollen cloth.	47	10	28	101	51	2,464	693	399	2,030	372	370	6,565	52.9
Totals, Forty Leading Industries.	58,250	7,733	50,729	31,373	103,437	44,575	15,675	20,560	34,164	16,637	51,159	434,512	49.0
Totals, All Industries.	75,715	12,005	81,352	45,719	137,378	64,809	20,099	27,516	43,535	21,879	60,850	590,887	48.7

1 Not available.

Subsection 3.—Wages and Salaries in Canadian Manufacturing Industries.

The total salaries and wages disbursed by manufacturers in 1935 was \$590,326,904 paid to 582,874 workers, compared with \$813,049,842 paid to 694,434 persons in 1929 and \$509,382,027 paid to 621,694 persons in 1917. Of the 1935 aggregate, \$173,020,195 or 29 p.c. was paid to 105,579 salaried employees who constituted 18 p.c. of the total number, and \$417,306,709 or 71 p.c. was paid in wages to 477,295 wage-earners, who formed 82 p.c. of the aggregate number of employees.

The average salary paid in the manufacturing industries during 1935 was \$1,639, compared with \$1,982 in 1930 and \$1,299 in 1917, while the average wage in 1935 was \$874, compared with \$785 in 1933, \$1,045 in 1929 and \$760 in 1917. Thus during the eighteen years since 1917, average salaries have increased by 26 p.c., while average wages have increased by only 15 p.c. (See Table 25.)

24.—Employees on Salaries and Wages in the Manufacturing Industries, 1935, by Sex, and Average Salaries and Wages, 1934 and 1935, by Provinces and Groups.

Province or Group.	Employees on Salaries.			Average Salaries.		Employees on Wages.			Average Wages.	
	Male.	Female.	Total.	1935.	1934.	Male.	Female.	Total.	1935.	1934.
	No.	No.	No.	\$	\$	No.	No.	No.	\$	\$
PROVINCE.										
Prince Edward Island....	221	39	260	818	765	592	256	848	478	478
Nova Scotia.....	1,939	492	2,431	1,344	1,270	11,346	2,283	13,629	791	744
New Brunswick.....	1,691	410	2,101	1,482	1,466	9,840	1,996	11,836	724	723
Quebec.....	24,246	6,410	30,656	1,646	1,624	112,034	46,981	159,015	773	748
Ontario.....	40,649	13,340	53,989	1,695	1,672	176,789	50,660	227,449	933	891
Manitoba.....	3,826	931	4,757	1,547	1,532	15,090	3,392	18,482	938	880
Saskatchewan.....	1,756	313	2,069	1,274	1,262	3,912	374	4,286	907	893
Alberta.....	2,383	449	2,832	1,423	1,412	8,100	1,155	9,255	916	897
B.C. and Yukon.....	5,330	1,154	6,484	1,609	1,574	29,075	3,420	32,495	1,005	958
Totals.....	82,041	23,538	105,579	1,639	1,614	366,778	110,517	477,295	874	837
INDUSTRIAL GROUP.										
Vegetable products.....	12,778	3,311	16,089	1,577	1,552	43,974	19,222	63,196	783	765
Animal products.....	8,378	2,044	10,422	1,400	1,350	39,121	10,581	49,702	794	770
Textiles and textile products.....	8,927	4,178	13,105	1,635	1,649	48,410	59,184	107,594	698	682
Wood and paper products	20,026	4,866	24,892	1,568	1,545	89,513	9,319	98,832	902	867
Iron and its products....	10,964	2,854	13,818	1,799	1,784	78,623	2,985	81,608	1,048	964
Non-ferrous metal products.....	5,137	1,657	6,794	1,838	1,874	22,781	4,038	26,819	1,038	997
Non-metallic mineral products.....	4,045	885	4,930	1,658	1,653	17,868	544	18,412	1,045	1,009
Chemicals and allied products.....	4,989	1,879	6,868	1,796	1,815	9,311	2,754	12,065	943	915
Miscellaneous industries..	1,847	574	2,421	1,660	1,679	7,959	1,890	9,849	839	837
Central electric stations..	4,950	1,290	6,240	1,716	1,659	9,218	Nil	9,218	1,281	1,312

Average Earnings, by Provinces and Industrial Groups.—In 1935, Ontario showed the highest average salary of \$1,695, followed by Quebec with \$1,646, British Columbia with \$1,609, and Manitoba with \$1,547. The head offices of many large corporations being located in Montreal, Toronto, Vancouver, and Winnipeg tends to raise the average salaries in the provinces in which these cities are situated. In the other provinces the averages were smaller, the lowest being in Saskatchewan. No regional tendency is observable in salary payments as the following averages for 1935 show: New Brunswick \$1,482, Alberta \$1,423, Nova Scotia \$1,344, and Saskatchewan \$1,274.

British Columbia, with average wages paid of \$1,005 per annum, was the highest in 1935, being \$131 higher than the general average. In the western provinces average wages are usually higher, due to an unusually small proportion of women workers, while many of the male employees were engaged in the better-paid wood and paper, electric light and power industries. In the four provinces situated to the east, average wages in manufacturing were lower than the mean for the Dominion, while from Ontario westward the opposite was the case. The seasonal nature of some of the leading industries, notably fish preserving and lumbering, tends to reduce the mean wage in the Maritime Provinces and Quebec, while, in addition to this, Quebec also has a larger proportion of female wage-earners (employed chiefly in the textile, food, and tobacco industries), than any other province, except Prince Edward Island.

The highest average salary, *viz.*, \$1,838, was reported by the non-ferrous metal products group, while the animal products group, with an average salary of \$1,400 in 1935, was the lowest. In wages paid, central electric stations came first with an average of \$1,281, there being no female wage-earners in this industry. The textile industries, on the other hand, had the lowest average wage of \$698, due to the fact that in this group about 55 p.c. of the wage-earners were females. As is stated at the top of p. 451, of all the female wage-earners employed in the manufacturing industries of Canada, over 47 p.c. found employment in the textile industries.

Average Earnings in the Forty Leading Industries.—Table 25 shows employees by sex and the average salaries and wages paid in the forty leading industries during 1935, together with average salaries and wages paid in 1934. The rank of each industry is based on the aggregate salaries and wages paid.

In only ten industries did the average salaries exceed \$2,000; in fifteen they ranged from \$1,700 to \$2,000; in seven they ranged from \$1,500 to \$1,700; while in the remaining eight they were below \$1,500. None of the six industries paying the highest salaries—sugar refining \$2,779, pulp and paper \$2,379, leather tanneries \$2,361, non-ferrous metal smelting and refining \$2,199, breweries \$2,173, and petroleum products \$2,108—reported a proportion of female salaried employees equal to the general percentage of the forty leading industries. The lowest salaries were reported by the sawmilling, butter and cheese, and bread and other bakery products industries.

The highest wages, those above \$1,200, were paid in seven industries—non-ferrous metal smelting and refining \$1,327, petroleum products \$1,323, automobiles \$1,321, coke and gas products \$1,282, central electric stations \$1,281, printing and publishing \$1,275, and primary iron and steel \$1,247—in all of which the proportion of skilled workers is probably high. In seven other industries average wages ranged from \$1,000 to \$1,200. These were: sugar refining \$1,150, pulp and paper \$1,143, breweries \$1,138, railway rolling-stock \$1,040, automobile supplies \$1,031, machinery \$1,010, and paints and varnishes \$1,001. In most of these industries the proportion of women workers is low. In thirteen other industries average wages ranged between \$800 and \$1,000, while in the remaining thirteen they were below \$800. This last group includes seasonal industries, such as fruit and vegetable canning, fish curing and packing, and industries which contain a large number of small units in which the work is intermittent, such as feed mills. Other industries with low average wages were: textiles, tobacco, and boots and shoes, in which the proportion of female wage-earners is high, the number in several of these industries being greater than those of the male.

25.—Statistics of Salaries and Wages Paid in the Forty Leading Industries, 1935, together with Comparative Figures of Average Salaries and Wages Paid in 1934, and Totals and Averages Paid in Representative Years 1917-35.

NOTE.—Industries ranked according to the aggregate salaries and wages paid.

Industry.	Salaries.						Wages.					
	Salaried Employees.		Total Salaries.	Average Salaries.			Wage-Earners.		Total Wages.	Average Wages.		
	Male.	Female.		1935.	1934.		Male.	Female.		1935.	1934.	
	No.	No.	\$	\$	\$		No.	No.	\$	\$	\$	
1 Pulp and paper.....	2,791	499	7,827,961	2,379	2,252		23,913	633	28,065,352	1,143	1,098	
2 Printing and publishing.....	5,798	1,914	11,363,513	1,473	1,448		7,955	1,222	11,697,999	1,275	1,254	
3 Central electric stations.....	4,950	1,290	10,708,868	1,716	1,659		9,218	Nil	11,811,125	1,281	1,312	
4 Automobiles.....	1,459	471	4,046,338	2,097	1,992		10,866	299	14,751,261	1,321	1,190	
5 Railway rolling-stock.....	1,228	68	2,529,387	1,952	1,948		15,602	23	16,256,284	1,040	935	
6 Sawmills.....	2,622	190	2,250,109	800	780		22,755	160	15,461,548	675	606	
7 Electrical apparatus and supplies.....	2,927	1,082	7,144,241	1,782	1,746		8,565	2,975	10,450,518	906	879	
8 Bread and other bakery products.....	2,260	564	2,866,264	1,015	965		14,382	1,961	13,503,648	826	831	
9 Clothing, factory, women's.....	1,672	889	3,892,895	1,520	1,556		4,311	11,022	10,700,966	698	681	
10 Hosiery and knitted goods.....	921	578	2,710,446	1,808	1,796		6,038	10,974	11,542,207	678	662	
11 Castings and forgings.....	1,476	412	3,363,053	1,781	1,700		11,720	152	10,775,919	908	886	
12 Butter and cheese.....	2,850	726	3,495,689	978	958		10,861	349	10,409,446	929	895	
13 Printing and bookbinding.....	2,595	699	5,162,026	1,567	1,540		6,610	2,290	8,545,133	957	936	
14 Cotton yarn and cloth.....	423	144	1,163,749	2,052	1,988		11,294	6,260	12,042,516	686	718	
15 Non-ferrous metal smelting and refining.....	817	118	2,055,694	2,199	2,170		8,009	Nil	10,631,662	1,327	1,237	
16 Slaughtering and meat packing.....	2,154	317	4,265,175	1,726	1,703		7,319	884	8,183,172	998	978	
17 Primary iron and steel.....	706	125	1,441,393	1,735	2,166		8,662	30	10,837,997	1,247	1,136	
18 Boots and shoes, leather.....	1,085	428	2,481,228	1,640	1,629		8,946	5,471	9,261,643	642	614	
19 Rubber goods, including rubber footwear.....	1,299	416	2,947,122	1,718	1,736		6,684	2,624	8,070,309	867	947	
20 Machinery.....	1,656	487	3,658,097	1,707	1,553		6,684	122	6,873,154	1,010	943	
21 Biscuits, confectionery, cocoa, etc.....	1,798	480	3,889,159	1,707	1,688		3,666	4,502	5,426,404	664	642	
22 Clothing, factory, men's.....	1,250	385	2,272,203	1,390	1,387		3,901	3,760	6,718,167	877	790	
23 Silk and artificial silk.....	593	311	1,653,953	1,830	1,709		5,551	3,633	6,717,084	731	719	
24 Automobile supplies.....	548	237	1,400,411	1,784	1,740		5,231	598	6,011,023	1,031	963	
25 Tobacco, cigars, and cigarettes.....	1,602	602	3,479,509	1,579	1,620		2,113	3,828	3,741,539	630	585	
26 Petroleum products.....	830	99	1,957,994	2,108	1,919		3,917	10	5,195,230	1,323	1,174	
27 Sheet metal products.....	998	283	2,101,001	1,640	1,664		4,591	708	4,701,697	887	866	
28 Breweries.....	917	126	2,266,507	2,173	2,189		3,381	36	3,889,135	1,138	1,047	
29 Furnishing goods, men's.....	642	316	1,586,914	1,656	1,602		1,141	6,858	4,201,341	525	506	
30 Coke and gas products.....	987	321	2,038,602	1,559	1,619		2,798	1	3,589,259	1,282	1,194	
31 Boxes and bags, paper.....	705	258	1,978,139	2,054	2,018		2,461	2,138	3,453,921	751	742	
32 Flour and feed mills.....	1,569	181	2,094,324	1,197	1,094		3,561	143	3,071,183	829	821	
33 Woollen cloth.....	361	126	982,524	2,018	2,016		3,482	2,336	4,126,079	709	686	
34 Fruit and vegetable preparations.....	748	236	1,423,060	1,446	1,497		3,253	3,675	3,640,421	525	514	
35 Medicinal and pharmaceutical preparations.....	979	530	2,760,890	1,830	1,785		981	1,174	1,739,362	807	827	
36 Paints and varnishes.....	1,045	322	2,546,999	1,863	1,888		1,530	163	1,695,117	1,001	944	
37 Leather tanneries.....	296	69	861,893	2,361	2,315		3,486	116	3,058,213	849	826	
38 Sugar refineries.....	333	55	1,078,256	2,779	2,745		1,654	92	2,008,435	1,150	1,124	
39 Fish curing and packing.....	475	75	703,075	1,278	1,234		3,185	1,031	2,171,478	515	533	
40 Coffee, tea, and spices.....	595	173	1,392,881	1,814	1,727		788	562	1,144,196	848	843	
Totals, Forty Leading Industries.....	58,960	16,602	123,841,542	1,639	1,598		271,065	82,815	316,171,143	893	856	
Grand Totals, All Industries—												
1935.....	82,041	23,538	173,020,195	1,639			366,778	110,517	417,306,709			874
1934.....	77,721	22,009	160,986,876	1,614			338,953	106,479	372,607,759			837
1933.....	73,909	20,585	151,860,323	1,607			299,109	100,300	312,701,767			785
1932.....	74,364	20,706	164,695,605	1,732			301,308	99,020	341,187,718			852
1931.....	77,576	22,222	186,810,794	1,872			351,553	106,075	437,734,767			957
1930 ¹	70,525	22,418	184,239,117	1,982			431,463	120,035	551,853,649			1,001
1929 ¹	73,792	22,815	188,747,672	1,954			468,043	129,784	624,302,170			1,045
1926 ¹	63,481	18,313	152,705,944	1,867			385,202	114,543	501,144,989			1,003
1924.....	59,412	16,818	139,614,639	1,831			333,156	99,117	420,269,406			972
1922.....	76,040		136,219,171	1,791			398,390		374,212,141			939
1920.....	83,015		148,267,360	1,786			526,571		583,853,225			1,109
1917.....	68,726		89,287,158	1,299			552,968		420,094,869			760

¹ See headnote to Table 26, p. 453.

Real Earnings of Employees in Recent Years.—When the index number representing the average yearly wages, with 1917 as a base, is divided by the index number of the cost of living, converted to the same base, it is seen that real wages advanced by 24.2 p.c. between 1917 and 1935. The details of the computation are given in Table 26. There was little change in real wages during the three years 1917 to 1920, when prices were rising rapidly. During the following two years, 1921 and 1922, when prices dropped rapidly, real wages increased by 6 p.c. From then until 1931 there was a definite and almost continuous upward trend. In 1931 real wages reached 120.2 and then declined to 113.8 in 1933 and rose again to 124.2 in 1935, the highest on record.

26.—Average Yearly Earnings, and Index Numbers of Earnings, Cost of Living and Real Wages of Wage-Earners, in Manufacturing Industries, 1917-35.

NOTE.—The figures of average numbers of wage-earners and average earnings for the years 1931 to 1935 are strictly comparable with those for the years prior to 1925 but not with those for the intervening years. The figures for the latest years—as for the earliest—represent the earnings for complete man-years of work, with no allowance for periods of unemployment. The difference amounts only to about 3 or 4 p.c. in the total figures and affects chiefly the seasonal industries. (See footnote 1 to Table 4, p. 411.)

Year.	Amount of Wages Paid.	Average Number of Wage-Earners.	Average Yearly Earnings.	Index Numbers.		
				Average Yearly Earnings.	Cost of Living.	Real Value of Average Yearly Earnings.
	\$	No.	\$			
1917.....	420,094,869	552,968	760	100.0	100.0	100.0
1918.....	480,949,599	547,599	878	115.5	114.0	101.3
1919.....	496,570,995	529,327	938	123.4	125.3	98.5
1920.....	583,853,225	526,571	1,109	145.9	145.2	100.4
1921.....	381,910,145	381,203	1,002	131.8	127.6	103.2
1922.....	374,212,141	398,390	939	123.6	116.8	105.8
1923.....	428,731,347	446,994	959	126.1	116.8	107.9
1924.....	420,269,406	432,273	972	127.9	114.5	111.7
1925.....	452,958,655	466,602	971	127.8	116.0	110.2
1926.....	501,144,989	499,745	1,003	132.0	116.8	113.0
1927.....	531,583,250	533,450	997	131.3	115.1	114.1
1928.....	580,428,493	566,780	1,024	134.8	115.6	116.5
1929.....	624,302,170	597,827	1,045	137.5	116.8	117.7
1930.....	551,853,649	551,496	1,001	131.7	115.9	113.6
1931.....	437,734,767	457,628	957	125.8	104.7	120.2
1932.....	341,187,718	400,328	852	112.1	95.1	117.9
1933.....	313,701,767	399,409	785	103.3	90.8	113.8
1934.....	372,607,759	445,432	837	110.1	91.9	119.8
1935.....	417,306,709	477,295	874	115.0	92.6	124.2

Percentages of Wages and Salaries to Value of Products.—Table 27 shows the relation between wages and salaries paid by manufacturers and the total net value of production. Figures of gross production are often used in such calculations, but the values out of which the wages of employees must come in the long run are the values added to the raw materials while they are in the factory. Such added values constitute the real production of the manufacturing plant and are alone available for payment of wages and salaries, of interest, rent and taxes, repairs, and all other overhead charges that must be ordinarily met. The percentage of salaries was highest in the years 1931 to 1935. These were years in which manufacturing production was curtailed and it is probable that, salaried employees being a part of the organization of an industry rather than of its productive force, salaries were an abnormally high percentage of the lower levels of production then prevailing. The percentage declined steadily with the increasing manufacturing production maintained during the period 1924 to 1929, while from 1931

to 1935, due to decreased industrial activity, the percentage of salaries to value added rose to 13·4, 15·0, 14·5, 13·2, and 13·3, respectively. It should be borne in mind, however, that salaried employees increased 38·5 p.c. during the period 1924-35 while wage-earners increased but 10·4 p.c. The percentage of wages has fluctuated much less than that of salaries. The number of wage-earning employees may be more readily adjusted to the activity of the industry and wage levels likewise more readily adjusted to the price levels of the products. The percentage of wages to the values added in manufacture was thus only 3·5 p.c. lower in 1935 than in 1924. The percentage was highest in 1920, when, in the post-war inflation, average wages were highest (Table 26) and the efficiency of production lowest (Table 20).

In previous reports on manufactures the percentage of wages and salaries paid to the value added by manufacture was carried back to 1917. Under the new method of calculating the value added, whereby the cost of materials plus fuel and electricity is deducted from the gross value of the products, it is possible to go back to 1924 only. Under the old method of calculating the value added by manufacture only the cost of the materials used was deducted from the gross value of the products.

27.—Percentages of Wages and Salaries Paid to the Total Net Values of Manufacturing Production, 1924-35.

Year.	Value Added by Processes of Manufacture.	Salaries Paid.	Wages Paid.	Percentage—		
				of Salaries to Value Added.	of Wages to Value Added.	of Total Salaries and Wages to Value Added.
	\$	\$	\$	p.c.	p.c.	p.c.
1924.....	1,180,699,241	139,614,639	420,269,406	11·8	35·6	47·4
1925.....	1,280,504,159	143,056,516	452,958,655	11·2	35·4	46·6
1926.....	1,406,574,164	152,705,944	501,144,989	10·9	35·6	46·5
1927.....	1,544,296,557	162,348,978	531,583,250	10·5	34·4	44·9
1928.....	1,725,338,540	174,770,879	580,428,493	10·1	33·6	43·7
1929.....	1,894,910,456	188,747,672	624,302,170	10·0	32·9	42·9
1930.....	1,665,631,770	184,239,117	551,853,649	11·1	33·1	44·2
1931.....	1,390,409,237	186,810,794	437,734,767	13·4	31·5	44·9
1932.....	1,097,284,291	164,695,605	341,187,718	15·0	31·1	46·1
1933.....	1,048,259,450	151,860,323	313,701,767	14·5	29·9	44·4
1934.....	1,222,943,899	160,986,876	372,607,759	13·2	30·5	43·7
1935.....	1,302,179,099	173,020,195	417,306,709	13·3	32·1	45·4

Subsection 4.—Size of Manufacturing Establishments.

A modern characteristic of industry in all industrial countries has been the increase in the size of the typical manufacturing establishment. The full utilization of highly specialized machinery necessitates large-scale production, while the improvements in transportation have widened the market.

The size of the manufacturing establishment is generally measured either by the number of employees or by the value of product, but each of these methods has its limitations. The former takes no account of the differences in capital equipment at different times or in various industries and obviously the increased use of machinery, as in the flour-milling industry, may lead to increased production concurrently with a decrease in the number of employees. The latter measure has to be adjusted for changes in the price level; and, as between industries, it makes those which handle expensive raw materials appear to operate on a larger scale. Both measures are subject to two limitations: firstly, they depend on the fluctuation of business

activity and the demand of the consumer; secondly, over any lengthy period of time there is the difficulty of comparability resulting from changes in the method of the census. Since 1932, for example, due to the difficulty of eliminating duplication in the value of production in central electric stations, as well as the difficulty of apportioning the capital investment as between different cities, it has been found necessary to exclude figures for central electric stations in showing statistics of size of establishment as well as statistics of cities and towns.

Size as Measured by Gross Value of Products.—While in 1922 the 420 establishments each producing over \$1,000,000 had an aggregate value of products of \$1,268,056,129 or 51 p.c. of the total production of all manufacturing industries, the 719 establishments producing over \$1,000,000 each in 1929 had an aggregate value of products of \$2,516,064,954, or 62 p.c. of the grand total for all manufacturing establishments—a very significant change in the short period of eight years. In 1931, however, the number of plants with a production of over a million dollars dropped again to 482, their output being valued at \$1,451,658,954 or 53 p.c., of the total. Due to the elimination of central electric stations, the figures since 1932 are not directly comparable with those for 1929 or 1922.

28.—Manufacturing Establishments Grouped According to Gross Values of Products, with Total and Average Values of Products in each Class, for Canada, 1922, 1929, 1934, and 1935.

Group of Gross Values.	1922.			1929. ¹		
	Estab-lish-ments.	Total Production.	Average Pro-duction.	Estab-lish-ments.	Total Production.	Average Pro-duction.
	No.	\$	\$	No.	\$	\$
Under \$25,000.....	14,978	114,205,770	7,625	14,024	106,735,470	7,611
\$ 25,000 but under \$ 50,000.....	2,401	85,075,807	35,433	2,802	99,529,725	35,521
50,000 " 100,000.....	1,793	129,320,947	72,125	2,209	156,308,744	70,760
100,000 " 200,000.....	1,355	191,675,689	141,458	1,688	237,532,492	140,718
200,000 " 500,000.....	1,078	330,533,712	306,617	1,519	504,218,217	331,941
500,000 " 1,000,000.....	516	363,341,076	704,149	636	443,597,677	697,481
1,000,000 " 5,000,000.....	364	692,463,530	1,902,372	601	1,217,866,089	2,026,400
5,000,000 or over.....	56	575,592,599	10,278,439	118	1,298,198,865	11,001,685
Totals and Averages.....	22,541	2,482,209,130	110,119	23,597	4,063,987,279	172,225
	1934. ²			1935. ²		
	No.	\$	\$	No.	\$	\$
	No.	\$	\$	No.	\$	\$
Under \$25,000.....	17,070	116,445,708	6,822	16,476	117,586,181	7,137
\$ 25,000 but under \$ 50,000.....	2,427	86,146,296	35,495	2,552	90,448,169	35,442
50,000 " 100,000.....	1,876	133,417,838	71,118	1,943	137,698,893	70,869
100,000 " 200,000.....	1,300	182,914,474	140,703	1,377	192,476,536	139,780
200,000 " 500,000.....	1,116	346,314,102	310,317	1,191	372,397,600	312,676
500,000 " 1,000,000.....	422	297,821,747	705,739	452	315,147,466	697,229
1,000,000 " 5,000,000.....	354	714,932,036	2,019,582	396	786,490,824	1,986,088
5,000,000 or over.....	55	531,303,140	9,660,057	63	657,976,801	10,444,076
Totals and Averages.....	24,620	2,409,295,341	97,859	24,450	2,670,222,470	109,212

¹ The value of production in 1929 shown above is greater in the aggregate by \$34,615,939 than the value of production shown in the other tables of this chapter. This is due to the elimination from the other tables of the value of electric energy purchased by central electric stations from other generating plants for distribution to local consumers. For the reporting plant, however, the cost of such power is regarded as the cost of materials. This necessarily involves a duplication in the value of product for which it is impossible to make compensation as between the groups.

² The figures for 1934 and 1935 do not include central electric stations.

29.—Manufacturing Establishments, Grouped According to Gross Values of Products, with Total Values of Products in each Class, by Provinces, 1935.

NOTE.—The figures in this table do not include central electric stations.

Group of Gross Values.	Prince Edward Island.		Nova Scotia.		New Brunswick.	
	Estab-lish-ments.	Production.	Estab-lish-ments.	Production.	Estab-lish-ments.	Production.
	No.	\$	No.	\$	No.	\$
Under \$25,000.....	225	1,398,460	1,059	5,644,273	654	3,988,391
\$ 25,000 to \$ 50,000.....	13	456,982	74	2,590,925	72	2,516,971
50,000 " 100,000.....	7	511,043	65	4,512,448	38	2,679,178
100,000 " 200,000.....	4	710,794	30	4,104,919	28	3,711,811
200,000 " 500,000.....	Nil	—	30	8,831,038	26	8,008,699
500,000 " 1,000,000.....	Nil	—	4	2,765,814	5	3,441,100
1,000,000 " 5,000,000.....	Nil	—	12	33,563,302	11	28,764,361
5,000,000 or over.....	Nil	—	Nil	—	Nil	—
Totals.....	249	3,077,279	1,274	62,012,719	834	53,110,511

	Quebec.		Ontario.		Manitoba.	
	Estab-lish-ments.	Production.	Estab-lish-ments.	Production.	Estab-lish-ments.	Production.
	No.	\$	No.	\$	No.	\$
Under \$25,000.....	5,623	38,475,667	5,901	47,983,886	673	4,424,688
\$ 25,000 to \$ 50,000.....	705	25,081,023	1,196	42,221,419	116	4,149,179
50,000 " 100,000.....	506	36,153,685	947	67,172,929	107	7,321,298
100,000 " 200,000.....	346	48,904,871	712	99,252,916	70	10,004,530
200,000 " 500,000.....	368	114,288,161	586	183,925,919	50	14,957,607
500,000 " 1,000,000.....	128	90,278,186	240	166,604,181	25	17,483,594
1,000,000 " 5,000,000.....	108	229,853,496	207	403,403,877	14	27,841,208
5,000,000 or over.....	23	190,177,157	26	359,462,252	3	24,822,370
Totals.....	7,807	773,212,246	9,815	1,370,027,379	1,058	111,004,474

	Saskatchewan.		Alberta.		British Columbia.	
	Estab-lish-ments.	Production.	Estab-lish-ments.	Production.	Estab-lish-ments.	Production.
	No.	\$	No.	\$	No.	\$
Under \$25,000.....	584	3,048,928	664	4,423,160	1,093	8,198,728
\$ 25,000 to \$ 50,000.....	60	2,114,973	112	3,955,644	204	7,361,053
50,000 " 100,000.....	50	3,450,831	69	4,684,363	154	11,213,118
100,000 " 200,000.....	35	4,874,474	35	4,526,449	118	16,713,772
200,000 " 500,000.....	17	5,587,975	21	7,481,584	93	29,496,808
500,000 " 1,000,000.....	Nil	—	9	6,454,654	40	27,611,746
1,000,000 " 5,000,000.....	9	23,866,916	16	36,979,771	26	45,540,725
5,000,000 or over.....	Nil	—	Nil	—	4	40,692,190
Totals.....	755	42,444,097	926	68,505,625	1,732	186,828,140

Size of Establishments as Measured by Number of Employees.—In 1923, establishments employing 501 hands or over accounted for 21·4 p.c. of the total number of employees engaged in manufacturing. By 1929 it had increased to 27·3 p.c. of the total, thereby showing the increasing concentration of production into larger units. This tendency, however, was checked by the depression, the percentage having dropped in 1933 to 20·5 p.c. (central electric stations included). The same also holds true for all establishments employing 101 hands or over. In 1923 they employed 58·5 p.c. of the total, in 1929, 61·9 p.c., and in 1933, 55·7 p.c.

30.—Establishments and Employees in Canadian Manufactures, Grouped According to the Number of Employees per Establishment, 1923, 1929, 1931, and 1935.

Group.	1923.			1929. ¹		
	Establishments.	Employees.	Average Employed.	Establishments.	Employees.	Average Employed.
	No.	No.	No.	No.	No.	No.
Fewer than 5 employees....	13,156	22,789	1.7	12,273	30,446	2.5
5 to 20 employees.....	5,310	53,852	10.1	6,160	62,310	10.1
21 " 50 ".....	2,093	67,408	32.2	2,531	81,846	32.4
51 " 100 ".....	1,031	73,449	71.2	1,262	90,238	71.5
101 " 200 ".....	566	79,737	140.8	745	103,944	139.5
201 " 500 ".....	374	115,585	309.0	444	136,397	307.1
501 or over.....	112	112,447	1,004.0	182	189,253	1,040.0
Totals and Averages...	22,642	525,267	23.3	23,597	694,434	29.4
	1934. ²			1935. ²		
	Establishments.	Employees.	Average Employed.	Establishments.	Employees.	Average Employed.
	No.	No.	No.	No.	No.	No.
Fewer than 5 employees....	14,296	26,736	1.8	13,719	24,058	1.8
5 to 20 employees.....	6,167	60,491	9.8	6,390	62,737	9.8
21 " 50 ".....	2,109	67,436	31.9	2,173	69,792	32.1
51 " 100 ".....	991	69,717	70.3	1,027	71,660	69.7
101 " 200 ".....	583	81,465	139.7	613	84,825	138.3
201 " 500 ".....	345	103,651	300.4	386	115,331	298.7
501 or over.....	129	120,692	935.6	142	139,013	798.9
Totals and Averages...	24,620	530,188	21.5	24,450	567,416	23.2

¹ See headnote to Table 26, p. 458.

² Exclusive of central electric stations.

31.—Establishments and Employees in Canadian Manufactures, by Provinces, and Average Number of Employees per Establishment, 1935.

NOTE.—The figures in this table do not include central electric stations.

Province and Item.	Under 5 Employees.	5-20.	21-50.	51-100.	101-200.	201-500.	501 or Over.	Total.
Prince Edward Island—								
Establishments.....	191	50	8	Nil	Nil	Nil	Nil	249
Employees.....	372	419	258	—	—	—	—	1,049
Averages per establishment.....	1.9	8.3	32.2	—	—	—	—	4.2
Nova Scotia—								
Establishments.....	832	309	80	29	9	12	3	1,274
Employees.....	1,573	2,787	2,491	1,968	1,306	3,471	1,626	15,222
Averages per establishment.....	1.8	9.01	31.1	67.8	145.1	289.2	542.0	11.9
New Brunswick—								
Establishments.....	512	224	52	21	13	9	3	834
Employees.....	1,002	2,104	1,676	1,475	1,837	2,898	2,473	13,465
Averages per establishment.....	1.9	9.3	32.2	70.2	141.3	322.0	824.3	16.1
Quebec—								
Establishments.....	4,742	1,733	651	288	204	134	55	7,807
Employees.....	8,508	17,059	20,787	19,745	27,504	41,859	53,474	188,936
Averages per establishment.....	1.8	9.8	31.9	68.5	134.8	312.3	972.2	24.2
Ontario—								
Establishments.....	4,907	2,809	1,023	506	306	195	69	9,815
Employees.....	10,371	28,063	32,983	35,723	42,862	56,494	68,314	274,810
Averages per establishment.....	2.1	9.9	32.2	70.5	140.07	289.6	990.05	27.9
Manitoba—								
Establishments.....	552	316	98	54	28	5	5	1,058
Employees.....	1,174	3,039	3,266	3,775	4,029	1,392	5,356	22,031
Averages per establishment.....	2.1	9.6	33.3	69.9	143.8	232.0	1,071.2	20.8
Saskatchewan—								
Establishments.....	534	162	38	13	8	Nil	Nil	755
Employees.....	1,021	1,394	1,206	835	1,347	—	—	5,803
Averages per establishment.....	1.9	8.6	31.7	64.2	168.3	—	—	7.6
Alberta—								
Establishments.....	613	219	47	29	8	10	Nil	926
Employees.....	1,250	2,065	1,517	2,045	1,062	3,570	—	11,509
Averages per establishment.....	2.03	9.4	32.2	70.5	132.7	357.0	—	12.4
British Columbia—								
Establishments.....	836	568	176	87	38	21	6	1,732
Employees.....	1,768	5,807	5,608	6,094	5,193	6,324	6,778	37,572
Averages per establishment.....	2.1	10.2	31.8	70.04	136.6	301.1	1,129.6	21.0

Size of Establishments of Some of the Leading Industries.—The following statement and Table 32 show the degree of concentration in some of the leading industries of Canada. Concentration is extremely marked in the case of non-ferrous metal smelting, petroleum products, automobiles, slaughtering and meat packing, and pulp and paper, whereas in the case of butter and cheese, sawmills, and bread and other bakery products, the degree of concentration is but moderate. With regard to flour and feed mills, concentration is marked in the case of flour mills, but the small size of the average feed mill offsets this for the industry as a whole.

PERCENTAGE IMPORTANCE OF ESTABLISHMENTS, EACH WITH A GROSS PRODUCTION OF \$1,000,000 AND OVER, IN CERTAIN INDUSTRIES.

Industry.	Number of Such Establishments.	Percentage to Total Number in the Industry.	Percentage of Total Production in the Industry.
Non-ferrous metal smelting.....	15	100	100
Pulp and paper.....	50	53	92
Slaughtering and meat packing.....	30	22	88
Automobiles.....	8	40	98
Butter and cheese.....	9	0.4	14
Flour and feed mills.....	20	2	65
Petroleum products.....	15	26	91
Sawmills.....	8	0.2	18
Electrical apparatus and supplies.....	10	6	59
Bread and other bakery products.....	6	0.2	15

32.—Size of Establishments of Some of the Leading Industries, Grouped According to the Gross Value of Products, and the Number of Persons Employed, 1935.

Group and Item.		Non-Ferrous Metal Smelting.	Pulp and Paper.	Slaughtering and Meat Packing.	Automobiles.	Butter and Cheese.
GROSS VALUE OF PRODUCTS.						
Under \$25,000—	Establishments...No.	Nil	1	36	3	1,838
	Production.....\$	—	1	637,169	8,448	18,889,977
\$ 25,000 to \$ 50,000—	Establishments...No.	Nil	9 ¹	14	3 ²	312
	Production.....\$	—	314,014 ²	481,862	142,866 ²	10,919,823
50,000 to 100,000—	Establishments...No.	Nil	6	18	2	253
	Production.....\$	—	488,390	1,290,532	2	17,632,184
100,000 to 200,000—	Establishments...No.	Nil	3	19	3	120
	Production.....\$	—	516,294	2,645,459	428,210	15,943,160
200,000 to 500,000—	Establishments...No.	3	15	14	3	46
	Production.....\$	3	4,895,735	4,435,271	1,021,658	13,495,658
500,000 to 1,000,000—	Establishments...No.	Nil	12	8	Nil	11
	Production.....\$	—	8,752,501	5,042,037	Nil	8,693,440
1,000,000 to 5,000,000—	Establishments...No.	5 ³	43	23	5	9
	Production.....\$	8,426,820 ³	104,327,868	46,726,714	9,121,238	14,314,729
5,000,000 or over—	Establishments...No.	10	7	7	3	Nil
	Production.....\$	177,818,838	43,356,480	71,220,268	95,902,025	Nil
NUMBER OF PERSONS EMPLOYED.						
Under 5—	Establishments...No.	Nil	Nil	40	3	2,113
	Employees.....No.	—	—	109	9	4,302
5 to 20—	Establishments...No.	Nil	5	53	4	391
	Employees.....No.	—	76	597	48	3,345
21 to 50—	Establishments...No.	2	14	13	4	45
	Employees.....No.	77	504	455	4	1,372
51 to 100—	Establishments...No.	Nil	15	6	4 ⁴	22
	Employees.....No.	—	1,041	435	236 ⁴	1,435
101 to 200—	Establishments...No.	2	15	12	3	9
	Employees.....No.	268	2,396	1,659	461	1,289
201 to 500—	Establishments...No.	4	25	10	5	9 ⁶
	Employees.....No.	1,268	8,267	3,235	5	3,043 ⁶
501 or over—	Establishments...No.	7	21	5	6 ⁵	8
	Employees.....No.	7,331	15,552	4,184	12,341 ⁵	6

For footnotes, see end of table, p. 464.

32.—Size of Establishments of Some of the Leading Industries, Grouped According to the Gross Value of Products, and the Number of Persons Employed, 1935—concl.

Group and Item.		Flour and Feed.	Petroleum Products.	Saw- mills.	Electrical Apparatus and Supplies.	Bread and Other Bakery Products.
GROSS VALUE OF PRODUCTS.						
Under \$25,000—	Establishments... No.	739	10	3,399	52	2,684
	Production..... \$	8,398,143	211,898	11,968,783	498,861	19,685,975
\$ 25,000 to \$ 50,000—	Establishments... No.	254	5	114	33	205
	Production..... \$	8,695,010	169,750	4,078,103	1,209,203	6,955,551
50,000 to 100,000—	Establishments... No.	78	6	69	26	82
	Production..... \$	5,352,742	440,844	4,744,633	1,853,046	5,680,856
100,000 to 200,000—	Establishments... No.	14	13	50	13	31
	Production..... \$	2,014,182	1,878,442	6,872,873	1,663,848	4,128,049
200,000 to 500,000—	Establishments... No.	15	6	38	32	28
	Production..... \$	4,598,845	2,067,544	12,731,274	10,478,322	8,390,672
500,000 to 1,000,000—	Establishments... No.	7	3	20	14	9
	Production..... \$	4,600,497	2,077,926	13,381,112	9,360,721	5,773,646
1,000,000 to 5,000,000—	Establishments... No.	15	8	8	127	6
	Production..... \$	32,894,537	20,239,359	12,128,354	36,088,833 ⁷	8,785,919
5,000,000 or over—	Establishments... No.	5	7	Nil	7	Nil
	Production..... \$	31,013,912	52,864,762	—	7	—
NUMBER OF PERSONS EMPLOYED.						
Under 5—	Establishments... No.	1,017	11	3,017	28	2,246
	Employees..... No.	1,567	27	4,914	70	4,922
5 to 20—	Establishments... No.	78	23	479	76	682
	Employees..... No.	635	227	4,367	847	5,523
21 to 50—	Establishments... No.	13	8	107	33	71
	Employees..... No.	417	223	3,474	1,154	2,110
51 to 100—	Establishments... No.	7	5	49	20	23
	Employees..... No.	478	312	3,435	1,605	1,641
101 to 200—	Establishments... No.	8	6	31	11	13
	Employees..... No.	1,107	764	4,367	1,535	1,831
201 to 500—	Establishments... No.	4	8	12	8	10
	Employees..... No.	1,250	8	3,377	2,133	3,140
501 or over—	Establishments... No.	Nil	5 ⁸	3	6	Nil
	Employees..... No.	—	3,303 ⁸	1,793	8,205	—

¹ Includes 1 establishment with production of \$25,000 or under.

² Includes 1 establishment with production of \$50,000 to \$100,000.

³ Includes 1 establishment with production of \$200,000 to \$500,000.

⁴ Includes 2 establishments with employees from 21 to 50.

⁵ Includes 1 establishment with employees of 501 or over.

⁶ Includes 2 establishments with production of \$5,000,000 or over.

⁷ Includes 3 establishments with employees of 201 to 500.

Subsection 5.—Power and Fuel.

Power.—The power equipment installed in manufacturing establishments is a very good barometer of the industrial development of Canada, inasmuch as the production is increasingly dependent on the power equipment. Increases and decreases in productive capacity, measured in horse-power, are not the result of temporary fluctuations in costs and values in the same manner as capital investments, values of products, etc. Power equipment will not reflect temporary depressions, but over a period of several years will indicate industrial growth or decline.

Central electric stations, which generate electricity for both lighting and power purposes, are treated, in Table 33, separately from the other groups of industries. Internal combustion engines include all gasoline engines, gas engines (natural, coal, and producer gas), and diesel and semi-diesel or other engines which produce power by burning the fuel in the cylinder.

Of the total increase in primary power equipment since 1923, amounting to 5,021,427 h.p., inclusive of central electric stations, 4,541,985 h.p., or 90.5 p.c., was in water power. However, some sections of Canada are not so well provided with water power and in such sections primary power derived from steam engines

and turbines and internal combustion engines has also increased rapidly during the period covered. In the provinces of Prince Edward Island, Nova Scotia, Saskatchewan, and Alberta, primary power produced from fuels exceeded that from water in 1935. The total installation of electric motors increased 2,071,261 h.p., or 159 p.c., in the 13 years covered, by far the greatest part of this increase being in motors operated by power purchased from central electric stations.

Of the total power equipment installed in the manufacturing industries (first part of Table 33), it will be seen that approximately 50 p.c. is used in the manufacture of wood and paper products; the next group in importance is iron and its products, which accounts for a little over 15 p.c.; non-ferrous metal products is third with 9.6 p.c. Together, these three groups account for about 75 p.c. of such installation.

Fuel and Electricity.—Fuel and electricity consumed by the manufacturing industries of Canada in 1935 was valued at \$84,273,129. Of this amount \$43,548,065 was for fuel and \$40,725,064 for electric power. The fuel used in industrial establishments in 1935 included 4,397,580 tons of bituminous coal valued at \$23,642,048, constituting 54.3 p.c. of the total fuel cost. The other chief fuels in order of value were: fuel oil 14.7 p.c., gas (principally manufactured gas) 13.2 p.c., coke 4.5 p.c., wood 3.4 p.c., and anthracite coal 3.0 p.c. Out of a fuel account of \$43,548,065, Ontario's requirements cost \$21,176,658 or 48.6 p.c. of the total; Quebec's cost \$10,887,347; Nova Scotia's, \$3,248,434; and British Columbia's, \$2,415,241.

The groups of industries in which fuel was most extensively used in 1935 were: non-metallic minerals \$8,742,968, wood and paper \$8,664,304, iron and steel products \$7,995,847, and vegetable products \$5,798,332. Fuel is used quite generally throughout the industrial field for the generation of power by means of internal combustion and steam engines. The most important industries where heat is applied directly to materials to transform them or to facilitate their manipulation are foundries and machine shops, blast furnaces and steel mills, smelting plants, brick, tile, lime and cement-making, petroleum refining, and the glass industry. In such industries as the manufacture of coke and gas the coal, used as a material which enters into the actual composition of the product, is not treated as a fuel but as a raw material and is not, therefore, included in the figures of Table 34.

The total annual expenditure on fuel decreased by \$8,092,847 or 15.7 p.c. in the fourteen years 1921-35 covered by the summary figures in Table 34. During this period prices of fuel generally have declined; thus with an increase of 7.2 p.c. in the quantity of bituminous coal used, the value decreased by 32.0 p.c.

The wood and paper products group is the largest user of electric power, the consumption in 1935 being valued at \$18,068,175 or 44.4 p.c. of the total cost of power used by all manufacturing industries. The iron and its products group ranks second with only 11.3 p.c. of the total. Other principal users were non-ferrous metal products, vegetable products, and textiles.

In the provinces of Quebec and British Columbia the cost of electricity exceeds that of fuel. For Quebec, which is the largest user of electrical power, the electricity used was valued at \$17,761,056 as against \$10,887,347 for fuel, while in British Columbia electric power totalled \$3,649,470 and fuel \$2,415,241. Ontario, which ranks second as a user of electrical energy, expended \$14,896,266 for electricity and \$21,176,658 for fuel.

33.—Totals for Canada of Power Installed in the Manufacturing Industries other than Central Electric Stations and in Central Electric Stations, 1921-35, with Details by Provinces and Industrial Groups for 1935.

MANUFACTURING INDUSTRIES (EXCLUSIVE OF CENTRAL ELECTRIC STATIONS).

Province or Group.	Steam Engines and Turbines.	Internal Com- bustion Engines.	Hy- draulic Turbines and Water Wheels.	Electric Motors Oper- ated by Pur- chased Power.	Total Power Equip- ment.	Electric Motors Operated by Power Generated by Estab- lishments Reporting.	Total Electric Motors.
	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
Totals, 1921.....	495,534	37,696	492,508	1	1	1	1,014,216
Totals, 1922.....	554,141	70,271	578,795	1	1	1	1,162,649
Totals, 1923.....	554,191	46,829	587,191	958,692	2,146,903	357,136	1,315,838
Totals, 1924.....	652,913	54,250	575,189	1,256,183	2,538,535	398,001	1,654,184
Totals, 1925.....	686,425	57,247	596,738	1,547,754	2,888,164	434,678	1,982,432
Totals, 1926.....	704,158	56,128	603,628	1,770,334	3,134,248	392,322	2,162,656
Totals, 1927.....	718,157	57,143	587,595	1,924,687	3,287,582	386,555	2,311,242
Totals, 1928.....	736,996	58,806	657,253	2,139,129	3,592,184	457,565	2,596,694
Totals, 1929.....	768,141	60,654	645,500	2,393,684	3,867,979	496,036	2,889,720
Totals, 1930.....	799,041	65,630	668,220	2,518,853	4,051,744	478,548	2,997,401
Totals, 1931.....	786,307	73,401	667,558	2,587,411	4,114,677	539,800	3,127,211
Totals, 1932.....	741,486	68,554	653,216	2,694,164	4,157,420	516,157	3,210,321
Totals, 1933.....	743,433	76,613	657,695	2,671,440	4,149,181	502,706	3,174,146
Totals, 1934.....	779,949	87,147	597,687	2,779,913	4,244,696	550,500	3,330,413
PROVINCE, 1935.							
Prince Edward Island.....	1,414	604	1,324	705	4,047	1	706
Nova Scotia.....	93,919	4,765	13,935	97,100	209,719	11,027	108,127
New Brunswick.....	67,795	3,577	28,491	96,958	196,821	46,875	143,833
Quebec.....	172,827	15,586	191,079	1,127,225	1,506,717	101,428	1,228,653
Ontario.....	271,629	43,457	244,969	1,146,299	1,706,352	228,408	1,374,705
Manitoba.....	16,250	3,862	25	107,683	127,820	1,060	108,743
Saskatchewan.....	13,349	2,651	70	21,000	37,070	96	21,096
Alberta.....	24,519	4,164	12	41,433	70,128	2,343	43,776
British Columbia and Yukon	118,281	9,679	123,849	236,292	488,101	121,158	357,450
Totals, 1935.....	779,983	88,345	603,754	2,874,693	4,346,775	512,396	3,387,089
INDUSTRIAL GROUP, 1935.							
Vegetable products.....	57,374	20,306	30,630	223,051	331,361	23,088	246,139
Animal products.....	27,385	5,384	1,861	87,930	122,560	2,988	90,918
Textile products.....	28,704	1,738	27,921	182,186	240,549	22,463	204,649
Wood and paper products.....	418,614	26,676	512,390	1,202,403	2,160,083	355,691	1,558,094
Iron and its products.....	159,939	23,004	3,964	473,584	660,491	69,395	542,979
Non-ferrous metal products...	28,796	2,548	18,460	367,123	416,927	22,467	389,590
Non-metallic mineral products.....	33,492	7,747	23	181,293	222,555	6,147	187,440
Chemicals and chemical products.....	17,034	254	8,505	104,671	130,464	7,600	112,271
Miscellaneous industries.....	8,645	688	Nil	52,452	61,785	2,557	55,009

CENTRAL ELECTRIC STATIONS.

Totals, 1921.....	269,191	15,871	1,826,357	-	2,111,419	-	-
Totals, 1922.....	279,615	16,751	2,112,289	-	2,408,655	-	-
Totals, 1923.....	273,679	17,191	2,282,547	-	2,573,417	-	-
Totals, 1924.....	291,354	18,241	2,707,957	-	3,017,552	-	-
Totals, 1925.....	306,491	20,188	3,416,018	-	3,742,697	-	-
Totals, 1926.....	314,377	22,426	3,609,385	-	3,946,188	-	-
Totals, 1927.....	320,774	22,610	3,975,012	-	4,318,396	-	-
Totals, 1928.....	316,311	25,058	4,445,531	-	4,786,900	-	-
Totals, 1929.....	347,641	30,875	4,718,927	-	5,097,443	-	-
Totals, 1930.....	393,990	34,462	5,144,109	-	5,572,561	-	-
Totals, 1931.....	433,728	34,753	5,422,319	-	5,890,800	-	-
Totals, 1932.....	456,674	35,600	6,036,259	-	6,528,533	-	-
Totals, 1933.....	467,453	36,125	6,305,997	-	6,809,575	-	-
Totals, 1934.....	464,142	36,776	6,560,674	-	7,061,592	-	-
PROVINCE, 1935.							
Prince Edward Island.....	4,248	980	464	-	5,692	-	-
Nova Scotia.....	73,851	1,184	81,606	-	156,641	-	-
New Brunswick.....	29,840	245	105,985	-	136,070	-	-
Quebec.....	38,474	273	3,475,705	-	3,514,452	-	-
Ontario.....	40,213	3,531	2,077,458	-	2,121,202	-	-
Manitoba.....	33,581	2,754	436,925	-	473,260	-	-
Saskatchewan.....	120,310	17,908	Nil	-	138,218	-	-
Alberta.....	77,067	4,785	69,520	-	151,372	-	-
British Columbia and Yukon	49,513	4,247	560,306	-	614,066	-	-
Totals, 1935.....	467,097	35,907	6,807,969	-	7,310,973	-	-

¹ Not available.

34.—Fuel and Electricity Used in the Manufacturing Industries of Canada, 1921-34, with Details by Provinces and Groups, 1935.

Province or Group.	Bituminous Coal.	Anthracite Coal.	Lignite Coal.	Coke.	Fuel Oils.	Wood.	Gas.	Other Fuel, Including Gasolene.	Cost of Electricity. ¹	Total, Including and Electricity. ¹
	short tons.	short tons.	\$	\$	\$	\$	\$	\$	\$	\$
PROVINCE, 1935.										
Prince Edward Island.....	8,762									99,192
Nova Scotia.....	389,124	1,924	396	Nil	3,326	8,015	Nil	4,127	16,246	4,466,252
New Brunswick.....	346,047	1,577,303	10,766	688	109,834	33,293	617,321	384,944	1,217,808	3,149,463
Quebec.....	1,032,332	6,011,124	730,022	49	281,812	102,719	19,560	85,388	1,255,175	28,048,403
Ontario.....	2,233,884	12,718,713	433,275	17,089	1,370,072	431,519	2,272,942	279,159	17,761,056	36,072,694
Manitoba.....	78,780	505,891	91,987	332,202	21,248	146,036	93,452	46,355	14,896,266	28,465,218
Saskatchewan.....	132,551	572,862	747	207,767	391,469	64,730	41,874	121,321	1,798,232	4,457,476
Alberta.....	111,853	244,997	765	242,871	13,302	39,187	335,294	38,523	504,297	1,518,754
British Columbia and Yukon.....	74,247	375,244	1,511	1,667	105,150	107,616	101,597	507,304	3,649,470	6,064,711
Totals, 1935.....	4,397,580	23,642,048	1,289,514	861,886	6,388,274	1,490,673	5,744,664	2,472,275	40,725,064	84,273,129
INDUSTRIAL GROUPS, 1935.										
Vegetable products.....	546,010	3,002,787	408,847	171,946	398,878	556,885	631,117	221,466	3,290,411	9,088,743
Animal products.....	310,518	1,733,172	45,175	253,966	11,377	215,960	450,458	100,073	1,659,430	4,434,745
Textiles and textile products.....	465,780	2,701,217	62,103	40,614	63,335	304,886	115,134	125,214	3,243,129	6,957,306
Wood and paper products.....	1,086,546	6,107,533	369,732	13,632	24,610	917,501	224,331	865,982	18,068,175	26,732,470
Iron and its products.....	898,763	3,970,452	16,382	212,902	361,752	1,328,037	1,845,749	150,924	4,010,659	12,612,506
Non-ferrous metal products.....	121,853	631,522	4,515	89,390	97,705	355,380	132,314	29,301	4,946,300	6,717,809
Non-metallic mineral products.....	435,261	2,446,047	7,858	32,308	684,492	2,123,974	223,195	207,816	2,625,464	11,368,462
Chemicals and chemical products.....	285,629	1,506,394	33,152	809	58,506	167,023	25,945	101,835	2,841,474	4,356,062
Miscellaneous industries.....	33,061	209,127	1,853	1,347	7,614	45,512	23,416	9,343	2,544,022	4,850,171
Central electric stations.....	304,159	1,133,817	Nil	145,272	Nil	372,816	31,414	360,091	534,022	2,054,876

¹ Cost of electricity for central electric stations excluded.

* Does not include cost of electricity.

* Not available.

Section 5.—Manufacturing Industries in Cities and Towns.

The prosperity of most of the cities and towns of Canada, especially in the East, is intimately connected with their manufacturing industries, which provide employment for a large proportion of their gainfully occupied population. In the West the cities are more largely distributing centres, though manufactures are rapidly increasing there also.

Table 35, indicating the extent to which the manufacturing industries of Canada are concentrated in urban centres, shows by provinces the proportion of the gross manufacturing production contributed by cities and towns having a gross production of over \$1,000,000 each. In the more highly industrialized provinces of Ontario and Quebec such cities and towns account for about 92 p.c. of the total, while in British Columbia and the Maritime Provinces, where sawmilling, fish packing, and dairying are leading industries, the proportion falls to 68 p.c. and 67 p.c., respectively. In the Prairie Provinces manufacturing is confined largely to a few large urban centres.

35.—Cities and Towns with a Gross Manufacturing Production of over \$1,000,000 each, Number of Establishments and Total Gross Production in such Cities and Towns as a Percentage of the Grand Total, by Provinces, 1935.

NOTE.—Figures published in this table are in some cases higher than those published in Table 37, since in the table below are included statistics of towns with less than three establishments and production of over \$1,000,000 each. It was not possible to publish this information in Table 37 without disclosing the operations of individual establishments. The statistics in this table do not include central electric stations.

Province.	Cities and Towns with a Gross Production of over \$1,000,000 each.	Establishments Reporting in Cities and Towns Producing over \$1,000,000 each.	Total Production in Cities and Towns Producing over \$1,000,000 each.	Total Production in each Province.	Production in Cities and Towns as a Percentage of Total Production in each Province.
	No.	No.	\$	\$	p.c.
Prince Edward Island.....	1	36	1,433,920	3,077,279	46.6
Nova Scotia.....	9	266	40,695,902	62,012,719	65.6
New Brunswick.....	8	256	36,838,192	53,110,511	69.4
Quebec.....	50	3,511	696,301,304	773,212,246	90.1
Ontario.....	96	6,335	1,280,660,702	1,370,027,379	93.5
Manitoba.....	5	678	94,389,382	111,004,474	85.0
Saskatchewan.....	4	233	33,870,024	42,444,097	79.8
Alberta.....	5	375	56,931,416	68,505,625	83.1
British Columbia.....	9	1,139	127,782,411	186,828,140	68.4
Totals.....	187	12,829	2,368,903,253	2,670,222,470	88.7

The six chief manufacturing cities of Canada in 1935 were: Toronto, Montreal, Hamilton, Windsor, Vancouver, and Winnipeg. Due to the amalgamation of the border cities, Windsor now ranks among the first six manufacturing centres. Toronto proper exceeded Montreal proper by a slight margin. Greater Montreal, however, is still ahead of Greater Toronto and continues to be the leading manufacturing area in the Dominion. According to the Census of 1931, Hamilton was proportionately the most largely dependent of these cities upon manufacturing industries. About 45 p.c. of its gainfully employed population was employed in manufacturing, as compared with 28 p.c. in Toronto, 27 p.c. in Montreal, 18 p.c. in Winnipeg, and 16 p.c. in Vancouver.

Eighteen other important cities with a gross production of manufactured goods of over \$15,000,000 in 1935 were as follows, in descending order of the value of their products: Oshawa, Montreal East, London, Kitchener, Quebec, Calgary, Ottawa, Peterborough, Three Rivers, Sarnia, Edmonton, Brantford, St. Boniface, New Toronto, Niagara Falls, Cornwall, Saint John, and St. Catharines. Statistics of manufactures of cities and towns with a gross production of \$1,000,000 or over and with three or more establishments are given for 1935 in Table 37.

36.—Principal Statistics of the Manufacturing Industries of Five¹ Leading Manufacturing Cities of Canada, 1930 and 1932-35.

NOTE.—Statistics for 1932-35 do not include central electric stations.

City and Year.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products. ²
	No.	\$	No.	\$	\$	\$
Montreal.....1930	1,825	485,332,181	98,905	115,753,191	250,718,415	532,404,756
1932	2,085	363,851,307	78,633	80,734,197	147,093,263	310,502,225
1933	2,226	363,342,078	80,212	74,150,933	148,504,215	300,636,197
1934	2,360	373,098,770	88,131	84,228,834	185,459,720	361,058,212
1935	2,346	382,332,791	94,612	89,934,540	201,022,033	383,547,972
Toronto.....1930	2,320	524,161,933	94,745	121,221,281	253,974,080	521,540,080
1932	2,370	417,748,359	76,652	88,204,053	147,910,861	323,326,758
1933	2,604	388,995,096	75,645	80,855,883	146,286,472	308,983,639
1934	2,627	392,080,083	81,629	89,569,170	174,820,861	357,706,747
1935	2,689	386,898,652	86,226	97,144,947	190,370,255	385,883,455
Hamilton.....1930	439	214,227,256	31,053	39,661,672	75,785,992	166,910,535
1932	445	176,981,408	21,733	23,378,011	34,372,679	83,068,855
1933	469	171,625,714	21,524	21,523,337	35,672,272	83,530,255
1934	494	174,755,759	24,072	25,772,958	44,548,853	100,272,872
1935	484	176,246,963	26,769	30,162,244	53,740,074	114,691,789
Winnipeg.....1930	519	123,781,546	19,749	25,844,816	45,720,081	94,407,201
1932	559	70,201,107	16,119	17,426,358	26,989,727	56,415,286
1933	600	73,886,398	15,336	15,155,537	28,355,612	59,287,280
1934	612	75,513,530	15,745	15,985,206	31,761,326	60,860,444
1935	616	71,837,683	16,649	17,568,803	36,825,174	67,217,042
Vancouver.....1930	681	128,684,902	16,068	20,874,524	45,730,258	90,975,000
1932	717	78,670,170	11,851	12,506,703	26,970,636	54,532,881
1933	746	74,209,271	12,094	11,754,124	28,588,106	55,160,883
1934	773	84,254,515	13,206	13,595,812	34,258,919	63,475,103
1935	811	83,594,899	15,683	16,789,590	39,863,397	73,981,872

¹ The amalgamated city, Windsor, ranked fourth among manufacturing cities in 1935, but since no historical series can be given it is omitted here. ² Net value is derived from gross value by deducting costs of materials, fuel, and electricity. For cost of fuel and electricity in 1935, see Table 37.

37.—Statistics of Manufactures of Municipalities, each with a Gross Production of \$1,000,000 or Over, and with Three or More Establishments, 1935.

NOTE.—Statistics in this table do not include central electric stations.

Municipality.	Estab- lish- ments.	Capital Invested.	Total Em- ployees.	Total Salaries and Wages.	Cost of Fuel and Electricity.	Cost of Materials Used.	Gross Value of Production. ¹
	No.	\$	No.	\$	\$	\$	\$
Prince Edward Island— Charlottetown.....	36	1,268,770	388	315,871	31,239	783,833	1,433,920
Nova Scotia—							
Sydney.....	30	23,568,939	1,899	2,586,198	1,408,806	5,953,662	11,616,575
Halifax.....	102	12,306,061	2,972	3,077,630	253,878	4,635,555	10,791,529
Dartmouth.....	12	4,652,081	341	428,420	142,473	2,854,299	4,761,628
Liverpool.....	8	10,714,843	606	794,393	644,111	1,242,218	4,014,323
Truro.....	27	3,356,821	970	690,919	49,185	1,486,284	2,860,645
Trenton.....	3	7,535,284	605	585,886	141,495	1,290,459	2,328,857
Yarmouth.....	32	2,413,639	500	364,858	64,441	786,894	1,625,303
New Glasgow.....	25	1,831,646	508	462,022	89,284	503,868	1,399,986
Amherst.....	27	3,285,362	490	500,555	57,550	597,874	1,297,056

¹ Net value is derived from gross value by deducting costs of materials, fuel, and electricity.

37.—Statistics of Manufactures of Municipalities, each with a Gross Production of \$1,000,000 or Over, and with Three or More Establishments, 1935—continued.

Municipality.	Estab- lish- ments.	Capital Invested.	Total Em- ployees.	Total Salaries and Wages.	Cost of Fuel and Electricity.	Cost of Materials Used.	Gross Value of Production. ¹
	No.	\$	No.	\$	\$	\$	\$
New Brunswick—							
Saint John.....	141	19,568,144	2,966	2,918,894	356,990	8,927,946	15,579,709
Moncton.....	44	6,310,217	2,009	1,912,622	155,607	3,012,719	5,445,520
Edmundston.....	10	5,996,727	472	450,843	415,771	1,216,551	3,371,895
Bathurst.....	13	5,306,881	420	471,019	241,815	655,836	1,939,445
St. Stephen.....	15	2,280,736	542	437,945	40,844	951,689	1,844,539
Milltown.....	3	2,966,517	647	495,938	33,998	679,709	1,467,136
Fredericton.....	27	1,311,670	389	314,876	32,186	534,900	1,081,177
Quebec—							
Montreal.....	2,346	382,332,791	94,612	89,934,540	6,629,070	201,022,033	383,547,972
Montreal East.....	11	40,176,067	1,627	2,099,253	1,824,687	34,347,750	43,519,874
Quebec.....	306	45,488,413	8,815	7,632,737	1,507,692	11,937,885	27,158,899
Three Rivers.....	54	49,871,807	5,090	4,604,767	2,869,078	8,248,964	22,328,837
La Salle.....	10	21,562,641	1,219	1,457,375	739,701	4,701,365	14,285,561
Drummondville.....	25	18,493,977	4,114	3,740,619	577,231	4,557,423	13,687,707
Sherbrooke.....	71	19,926,817	4,372	3,990,175	330,634	4,909,072	11,871,647
Shawinigan Falls.....	27	39,313,840	2,370	2,674,489	1,797,972	4,783,150	11,854,406
St. Hyacinthe.....	55	10,319,305	3,586	2,359,840	261,662	6,001,773	10,342,180
Hull.....	45	14,277,691	2,305	2,226,674	523,040	4,757,553	9,608,782
Magog.....	13	7,297,000	1,718	1,316,200	230,814	7,221,138	9,550,869
Granby.....	38	11,264,177	2,861	2,171,103	153,995	4,009,578	9,044,769
St. Jean.....	41	10,157,178	2,662	2,271,539	233,531	3,994,970	8,609,902
Lachine.....	37	17,115,611	2,014	2,548,474	263,524	3,047,095	7,567,774
Valleyfield.....	30	10,528,509	2,885	1,845,250	219,156	3,761,310	7,164,088
St. Jérôme.....	30	7,470,802	1,916	1,400,596	124,663	2,277,522	6,408,348
Grand Mère.....	14	16,144,307	1,415	1,174,623	601,220	1,969,738	4,803,643
La Tuque.....	12	11,587,018	751	859,890	353,092	2,108,531	4,616,205
Kenogami.....	7	15,379,425	890	1,240,389	635,332	1,830,918	4,578,683
Belœil.....	10	2,261,639	406	528,686	65,562	1,474,202	3,018,660
Louiseville.....	13	2,458,697	1,197	754,997	93,902	1,785,741	2,976,438
Buckingham.....	9	9,984,057	513	662,075	528,701	1,055,729	2,739,090
Westmount.....	11	1,566,056	747	884,293	63,029	884,285	2,705,911
Farnham.....	15	4,029,109	622	485,775	84,527	1,248,867	2,493,947
Brownburg.....	6	1,611,265	654	702,665	23,601	828,443	2,424,989
Windsor.....	9	5,488,701	562	538,690	170,778	789,776	2,362,057
East Angus.....	8	5,953,374	565	606,653	404,153	1,168,260	2,348,636
Cowansville.....	10	2,609,135	912	655,964	46,557	1,013,790	2,307,849
Dolbeau.....	5	10,507,976	269	439,515	531,201	707,528	2,285,523
Joliette.....	43	1,969,434	872	553,281	84,539	1,087,556	2,249,013
Port Alfred.....	3	19,440,637	344	489,902	584,015	656,612	2,224,624
Victoriaville.....	24	2,315,117	1,167	806,938	48,850	867,568	2,136,138
Lachute.....	9	3,246,514	526	421,777	19,716	850,521	2,117,902
Verdun.....	23	1,608,086	881	625,213	78,879	778,124	1,702,984
Outremont.....	8	1,673,175	376	399,249	18,834	879,105	1,665,178
Montmagny.....	15	2,575,980	760	431,821	33,017	783,518	1,632,297
Coaticook.....	21	2,248,641	628	337,186	31,203	941,491	1,621,491
Beauharnois.....	8	2,172,022	402	406,060	81,438	565,238	1,476,459
Cap de la Madeleine.....	11	950,384	435	263,311	18,820	806,878	1,298,291
Plessisville.....	14	1,097,562	370	232,782	19,375	707,839	1,274,884
Sorel.....	19	1,054,828	590	402,238	42,756	361,529	1,106,098
Ste. Thérèse.....	18	1,243,796	346	217,452	24,778	587,590	1,048,991
Jonquière.....	12	1,655,922	256	294,725	80,398	561,118	1,021,824
Ontario—							
Toronto.....	2,689	386,898,652	86,226	97,144,947	6,468,330	190,370,255	385,883,455
Hamilton.....	484	176,246,963	26,769	30,162,244	4,438,458	53,740,074	114,691,789
Windsor.....	236	64,298,564	15,227	20,714,545	1,622,096	64,062,711	104,908,197
Oshawa.....	43	22,042,343	5,796	7,498,353	457,271	28,260,574	43,549,374
London.....	251	37,146,164	8,614	9,090,550	662,597	16,680,022	37,613,775
Kitchener.....	159	33,432,626	8,034	7,505,880	536,856	17,198,361	34,929,052
Ottawa.....	205	32,581,576	6,633	7,521,545	611,638	9,375,408	23,398,659
Peterborough.....	81	20,088,682	4,515	4,140,800	379,178	12,414,632	23,128,953
Sarnia.....	47	20,138,369	3,159	3,316,221	1,157,373	16,609,100	21,970,254
Brantford.....	115	38,487,900	6,002	5,662,057	521,980	10,168,315	20,248,560
New Toronto.....	19	24,369,145	2,455	3,287,637	475,709	8,623,416	18,686,957
Niagara Falls.....	59	25,734,067	2,803	3,361,554	1,092,462	5,868,916	18,115,465
Cornwall.....	45	23,184,786	4,604	4,344,931	730,855	5,735,050	16,469,155
St. Catharines.....	94	18,093,201	4,226	4,430,910	404,907	7,012,290	15,428,949
Sault Ste. Marie.....	47	39,989,191	2,641	3,038,125	1,528,135	6,042,044	13,649,513
Welland.....	42	22,374,768	3,367	3,318,731	850,438	5,831,747	13,457,335
Guelph.....	88	13,488,191	3,513	3,212,449	299,026	5,510,984	12,121,172
Chatham.....	56	11,116,987	1,833	1,873,924	269,108	8,264,675	11,603,843

¹ Net value is derived from gross value by deducting costs of materials, fuel, and electricity.

37.—Statistics of Manufactures of Municipalities, each with a Gross Production of \$1,000,000 or Over, and with Three or More Establishments, 1935—continued.

Municipality.	Estab- lish- ments.	Capital Invested.	Total Em- ployees.	Total Salaries and Wages.	Cost of Fuel and Electricity.	Cost of Materials Used.	Gross Value of Production. ¹
	No.	\$	No.	\$	\$	\$	\$
Ontario—continued.							
Galt.....	78	12,450,048	3,599	3,179,457	242,584	4,432,505	10,014,832
Thorold.....	16	20,885,383	1,360	1,855,264	1,246,447	3,809,999	9,408,981
Woodstock.....	50	6,176,620	2,194	1,892,367	144,563	3,997,938	7,652,730
Stratford.....	57	7,846,682	2,360	2,313,880	184,952	4,164,036	7,449,692
Leamington.....	17	4,378,900	939	732,479	98,071	3,826,404	7,171,605
Simcoe.....	31	9,144,821	953	863,465	92,661	4,270,170	7,032,938
Leaside.....	21	6,742,773	1,351	1,626,319	139,370	2,553,318	6,221,235
Waterloo.....	41	8,526,183	1,173	1,084,883	77,833	1,708,273	5,461,595
Brockville.....	29	5,026,573	880	822,690	119,263	3,285,883	4,927,909
Preston.....	30	5,359,388	1,482	1,413,962	92,628	2,549,015	4,889,677
Kapuskasing.....	6	32,204,322	774	1,223,483	406,560	1,791,001	4,875,531
Port Arthur.....	28	14,774,804	971	1,309,747	631,221	1,745,797	4,406,776
Tilbury.....	8	1,083,038	471	484,190	40,418	3,091,590	4,358,982
Chippawa.....	3	1,126,356	251	351,253	252,445	876,898	4,291,746
Kingston.....	63	7,947,869	1,236	1,159,094	132,122	2,199,712	4,240,070
Merriton.....	8	5,190,946	824	1,057,223	215,974	1,860,227	4,160,438
Owen Sound.....	54	5,396,084	1,463	1,135,973	81,132	1,905,843	4,065,921
Paris.....	20	5,110,581	1,151	910,032	91,332	1,749,960	3,643,957
Wallaceburg.....	17	4,661,596	872	937,966	297,444	1,622,658	3,479,316
Belleville.....	45	6,133,476	1,036	801,781	103,124	1,661,562	3,432,318
Fort William.....	35	15,130,249	744	894,550	505,168	1,339,626	3,409,127
Fort Francis.....	10	7,619,215	576	764,430	188,640	1,558,951	3,313,187
Newmarket.....	13	3,336,871	727	705,593	51,464	1,938,823	3,277,049
Ingersoll.....	21	4,343,422	750	702,988	73,347	1,956,456	3,268,809
Delhi.....	5	940,130	356	253,818	7,323	2,841,956	3,177,743
Goderich.....	15	1,716,307	289	276,115	198,586	2,172,988	3,032,076
Fergus.....	12	1,619,595	871	820,743	46,589	1,572,722	2,937,291
Cobourg.....	25	2,656,640	548	564,228	92,926	1,270,214	2,922,819
St. Thomas.....	45	3,346,913	951	883,998	76,275	1,197,313	2,881,355
Perth.....	19	2,842,392	851	847,991	53,384	1,392,524	2,802,749
Trenton.....	22	3,157,595	613	522,551	153,444	1,423,375	2,776,130
Amherstburg.....	11	3,035,308	276	396,943	251,695	527,279	2,747,036
Hespeler.....	16	3,962,842	1,176	918,475	142,552	1,355,217	2,727,942
Bowmanville.....	13	3,035,693	497	506,952	79,872	1,101,272	2,718,550
Kenora.....	17	10,745,798	420	542,032	551,171	1,577,964	2,711,589
Weston.....	18	3,320,569	680	756,675	63,634	1,159,581	2,640,772
Port Hope.....	32	2,050,571	670	708,390	83,979	740,749	2,629,876
Hawkesbury.....	9	4,426,561	464	540,630	305,036	1,269,159	2,550,119
Brampton.....	24	2,269,301	844	827,958	34,655	1,304,533	2,525,925
St. Mary's.....	19	5,132,405	402	440,500	286,907	1,120,114	2,521,343
Dunnville.....	20	3,555,677	786	723,873	47,061	1,258,859	2,471,881
Huntsville.....	12	2,307,390	337	238,652	38,526	1,393,731	2,461,336
Port Credit.....	3	3,622,203	233	304,774	87,651	1,330,189	2,412,321
Petrolia.....	11	2,327,669	185	228,538	193,496	1,621,908	2,382,278
Port Erie.....	31	2,404,245	356	460,680	36,566	1,080,599	2,340,613
Pembroke.....	37	4,090,360	815	567,485	52,533	1,031,232	2,151,404
Georgetown.....	12	2,449,890	507	462,263	75,167	1,151,599	2,118,611
Renfrew.....	19	2,529,173	719	577,458	62,152	1,005,842	2,114,676
Tilsonburg.....	17	1,357,360	411	337,403	57,652	1,565,759	2,101,050
Orillia.....	32	2,345,874	605	552,807	37,224	1,087,998	1,996,081
Sudbury.....	35	2,500,920	471	489,967	46,009	842,180	1,975,260
Barrie.....	19	1,109,455	366	320,921	31,864	1,372,713	1,943,301
Hanover.....	16	2,812,691	654	514,188	42,878	950,428	1,855,957
Aurora.....	8	1,178,615	410	400,406	24,655	1,049,368	1,800,948
Lindsay.....	33	1,670,350	505	429,618	63,104	836,164	1,794,536
Aylmer.....	11	1,102,349	183	183,146	36,111	876,767	1,627,603
Dundas.....	22	3,108,796	553	656,246	38,842	724,487	1,625,785
Carleton Place.....	14	1,551,872	693	537,907	55,540	680,853	1,507,530
Midland.....	14	1,453,960	235	171,872	20,868	1,225,862	1,447,698
Gananoque.....	16	2,113,646	304	334,885	48,402	520,154	1,142,193
Smith's Falls.....	21	2,172,529	483	462,929	45,852	660,037	1,361,611
Burlington.....	11	1,417,826	282	225,508	23,616	785,191	1,361,250
Chesterville.....	4	601,267	65	62,740	24,691	828,351	1,342,994
Humberstone.....	4	708,875	398	338,740	4,379	850,885	1,311,739
Oakville.....	18	1,149,243	395	307,146	24,465	171,667	1,277,279
Grimsby.....	16	1,539,285	381	256,531	16,599	636,823	1,243,993
Elmira.....	16	3,029,553	413	368,046	29,399	523,458	1,197,335
Strathroy.....	15	1,186,393	309	221,572	23,003	764,298	1,190,333
Arnprior.....	16	1,958,843	227	267,415	34,416	374,505	1,117,033
Listowel.....	14	588,758	313	231,671	34,876	584,294	1,060,232
Timmins.....	22	1,215,651	246	224,610	25,025	438,995	1,000,607

¹ Net value is derived from gross value by deducting costs of materials, fuel, and electricity.

37.—Statistics of Manufactures of Municipalities, each with a Gross Production of \$1,000,000 or Over, and with Three or More Establishments, 1935—concluded.

Municipality.	Estab- lish- ments.	Capital Invested.	Total Em- ployees.	Total Salaries and Wages.	Cost of Fuel and Electricity.	Cost of Materials Used.	Gross Value of Production. ¹
	No.	\$	No.	\$	\$	\$	\$
Manitoba—							
Winnipeg.....	616	71,837,683	16,649	17,568,803	1,354,492	36,825,174	67,217,042
St. Boniface.....	44	10,685,679	1,553	1,812,401	213,055	14,113,277	19,691,474
Trancona.....	3	6,325,022	1,409	1,643,129	185,779	2,584,439	4,681,967
Selkirk.....	8	1,820,561	336	419,667	139,411	557,060	1,401,398
Portage la Prairie.....	7	561,856	100	89,369	31,077	1,074,443	1,397,501
Saskatchewan—							
Moose Jaw.....	39	13,617,077	937	980,203	268,181	8,656,054	12,027,156
Saskatoon.....	72	7,182,566	1,189	1,353,813	209,938	6,418,024	10,149,529
Regina.....	99	10,053,783	1,660	1,918,908	284,862	4,986,254	8,866,985
Prince Albert.....	23	1,952,160	386	393,543	58,869	1,939,008	2,526,354
Alberta—							
Calgary.....	164	28,209,532	4,208	4,642,942	527,442	16,368,181	25,823,804
Edmonton.....	162	17,462,756	3,825	4,181,126	291,443	13,733,441	21,755,617
Medicine Hat.....	20	5,361,194	464	476,532	43,819	3,612,285	5,087,496
Lethbridge.....	27	1,665,899	327	393,272	38,304	990,682	2,335,329
British Columbia—							
Vancouver.....	811	83,954,899	15,683	16,789,590	1,100,096	39,863,397	73,981,872
New Westminster.....	77	11,702,099	2,275	2,251,927	167,408	7,224,116	12,349,255
Victoria.....	133	10,337,048	2,062	2,222,224	182,148	2,499,304	6,566,104
North Vancouver.....	21	4,079,936	490	564,350	64,098	1,100,668	2,531,552
Prince Rupert.....	19	4,554,049	242	343,568	34,369	962,211	1,678,970
Port Alberni.....	8	1,585,583	295	397,676	1,779	834,310	1,540,436
Nelson.....	25	1,529,947	309	337,700	25,131	463,685	1,071,948
Kelowna.....	26	1,041,710	344	268,617	15,637	511,367	1,015,499

¹ Net value is derived from gross value by deducting costs of materials, fuel, and electricity.

CHAPTER XV.—CONSTRUCTION.

Relation of Construction Industry to General Business Conditions.—

The construction and building industry is not only the most widespread in its operation, it is one which expands most rapidly in good times when it attracts great numbers of general and casual workmen—a characteristic which explains the high rate of unemployment from which the industry periodically suffers. Again, apart from the effect of cyclical fluctuations of general business conditions, the construction industry is decidedly seasonal, although new types of construction and mechanical improvements are making it possible to work more steadily on all branches of construction the year round. Conditions in the industry are being transformed as the result of the introduction of new types of construction. Nevertheless, in the winter there is a serious contraction, especially in outside operations, while in the other seasons the contractors employ a much larger number of men, casually engaged, than can be retained throughout the year. A considerable number of men are in no sense skilled artisans and the supply of unskilled men is generally in excess of the demand.

Activity in construction is of particular interest not only to those engaged in the industry itself but to those concerned with the supplying of its raw materials, such as lumber, steel, cement, paint, glass, and hardware. All of these latter industries are prosperous when the construction industry is active, and depressed when it is at a standstill; again, the effects of their activity and depression are felt throughout the whole field of industry, so that the current conditions in the construction industry react powerfully upon the whole economic life of the nation. Thus, in the period between 1909 and 1913 and that between 1926 and 1929, construction contributed in large measure to produce the 'booms' of those years, as is indicated in the figures of Table 6.

During the war period the industry was at a low ebb, except for the construction of munition plants, but after the War the housing shortage was a serious problem, and considerable building was undertaken in spite of the high cost of materials and skilled labour, as shown in Table 9. The urgent requirements due to the practical suspension of the industry during the War were fully met in the post-war years, but the peak of the inflation cycle in 1929 was reflected in the highest value of construction contracts on record. This was followed by successive declines until 1933,* when the industry reached a very low level of activity. There was some recovery in 1934-36 and a further increase of about 38 p.c. in 1937. However, a very great deficiency in housing and other forms of construction must still remain from the suspension of activity during the depression years, to be overtaken when confidence is restored in the future stability of prices and the permanence of the recovery. To facilitate and encourage this process, the Dominion Housing Act was passed in 1935.

The Dominion Housing Act.—Administered by the Housing Administration Branch of the Department of Finance, the Dominion Housing Act, 1935, has a twofold purpose: (1) to assist in the improvement of housing conditions and (2) to assist in the absorption of unemployment by the stimulation of the construction and building material industries. The Minister of Finance is empowered to make advances and to pay expenses of administering the Act to the extent of \$10,000,000.

* October, 1933, marked the lowest point of activity in this industry.

The Act provides for loans for the construction only of new dwellings (including single-family houses, duplexes, and apartment houses), the security taken being in the form of a first mortgage running jointly to an approved lending institution and to the Dominion Government. In most cases, the loan may be for 80 p.c. of the cost of construction of the dwelling or its appraised value, whichever is the lesser; of a loan of 80 p.c., the lending institution advances 60 p.c. and the Government 20 p.c. The remaining 20 p.c. is provided by the borrower. Provision is also made in certain cases for loans of 70 or 75 p.c., where desired by the borrower or deemed advisable by the lending institution. The interest rate paid by the borrower is 5 p.c. This is made possible by the fact that the Government's funds are advanced on an interest basis of 3 p.c. Loans are made for a period of 10 years subject to renewal for a further period of 10 years upon revaluation of the security and on conditions satisfactory to all parties concerned. Interest, principal, and taxes are payable in monthly instalments. Amortization of principal is effected at a rate sufficient to pay off the loan in 20 years, but more rapid amortizations may be arranged to suit the convenience of the borrower. The Act requires sound standards of construction and contains other clauses safeguarding the mortgage.

The results of operations under the Dominion Housing Act, up to the end of February, 1938, were as follows:—

LOANS MADE UNDER THE DOMINION HOUSING ACT, TO FEB. 28, 1938.

Province.	Number of Loans.	Amount.	Number of Family Units Provided.
		\$	
Prince Edward Island.....	10	54,034	10
Nova Scotia.....	289	1,296,310	291
New Brunswick.....	61	267,967	64
Quebec.....	550	4,682,701	1,010
Ontario.....	988	5,948,653	1,422
Manitoba.....	49	312,814	49
Saskatchewan.....	2	8,200	2
Alberta.....	Nil	Nil	Nil
British Columbia.....	312	1,262,301	414
Totals.....	2,261	13,832,980	3,262

The Government Home Improvement Plan.—Although operative, by agreement between the Dominion Government and lending institutions, since Nov. 1, 1936, the Home Improvement Plan derives its legislative sanction from "An Act to Increase Employment by Encouraging the Repair of Rural and Urban Homes", assented to on Mar. 31, 1937. The object of the legislation is clearly indicated in its title. The method adopted is to stimulate the advance of money for home repair and improvement by a Government guarantee up to 15 p.c. of the aggregate amount loaned under the Plan by each approved lending institution.

The Plan, which is administered by the Department of Finance, was first sponsored by the National Employment Commission, and the Commission, at the request of the Government, undertook to advance it by all possible methods. Voluntary co-operative committees, provincial and local, were set up in every province. Through the co-operation of Canadian industry, an extensive publicity and adver-

tising campaign was initiated and carried on without cost to the Government. Explanatory booklets and leaflets in both languages were distributed extensively throughout the Dominion, speeches and radio broadcasts were utilized, and, in a number of cities, home improvement exhibitions designed to emphasize the desirability of house repair and modernization were held. From time to time statements indicating the increase in loan totals were issued by the Department of Finance.

The Plan provides for the making of loans by chartered banks and other approved lending institutions to owners of residential property (including farm buildings) for repairs, alterations, and additions (including built-in equipment) to urban and rural dwellings. Loans may be made up to a maximum of \$2,000 on any single-family house. In the case of a multiple-family dwelling the maximum amount which can be borrowed is \$1,000, plus \$1,000 for each family unit provided for in the building when the repairs or improvements are completed. The limit of time allowed for the payment of a Home Improvement loan is three years for a loan of \$1,000 or less, and five years for a loan exceeding \$1,000. Payment may be made in equal monthly instalments or in such other instalments as are adapted to the financial circumstances of the borrower. The maximum charge must not exceed a rate of discount of $3\frac{1}{4}$ p.c. for a one-year loan, repayable in equal monthly instalments. This is equivalent to an effective interest rate of 6.32 p.c.

The limit of the aggregate loans is \$50,000,000 and the limit of the Government's guarantee is therefore \$7,500,000.

Loans made under the Government Home Improvement Plan to Feb. 28, 1938, by provinces, were as follows:—

LOANS MADE UNDER THE GOVERNMENT HOME IMPROVEMENT PLAN, TO FEB. 28, 1938.

Province.	Number of Loans.	Amount of Loans.
Prince Edward Island.....	429	116,904
Nova Scotia.....	2,975	922,110
New Brunswick.....	1,446	495,344
Quebec.....	5,231	2,623,927
Ontario.....	15,496	6,078,236
Manitoba.....	2,252	853,530
Saskatchewan.....	904	311,858
Alberta.....	2,687	1,154,354
British Columbia.....	3,821	1,230,449
Totals.....	35,241	13,786,712

Industrial Statistics of Construction.*—The census of construction had its inception in 1934 and figures were collected in 1935 covering the calendar year 1934. Statistics for that year were presented at pp. 473-474 of the 1936 Year Book, and those for 1935 were shown at pp. 476-479 of the 1937 Year Book. No attempt at comparisons with 1934 was made, as the figures for the two years were not strictly comparable. With the completion of the 1936 figures, comparable statistics are now available covering the years 1935 and 1936, and a summary of the principal statistics is given in Table 1.

* Revised by F. I. Tanner, Officer in Charge of Construction Statistics.

Another matter which should be pointed out is that no relationship exists between the total value of construction, shown for 1936 below, and the value of contracts awarded as indicated on p. 479. In the latter case all values are included as soon as awards are made irrespective of whether the contract is completed or even begun in that year, whereas the tables below cover construction work carried on and actually performed in 1936.

1.—Principal Statistics of the Construction Industry in Canada, 1935 and 1936.

Item.		1935.	1936.	Increase (+) or Decrease (—)
Firms reporting.....No.		7,689	9,976	+2,287
Capital invested.....\$		158,471,916	164,322,276	+5,850,360
Salaries employees.....No.		18,670	21,059	+2,389
Salaries paid.....\$		22,579,526	25,270,846	+2,691,320
Wage-earning employees (average).....No.		126,098	121,287	-4,811
Wages paid.....\$		82,607,097	87,575,538	+4,968,441
Totals, employees.....No.		144,768	142,346	-2,422
Totals, salaries and wages paid.....\$		105,186,623	112,846,384	+7,659,761
Cost of materials used.....\$		94,733,584	122,189,238	+27,455,654
Value of work performed ¹\$		215,548,873	258,040,400	+42,491,527
New construction ¹\$		140,988,228	170,645,824	+29,657,596
Alterations, maintenance, and repairs ¹\$		74,560,645	87,394,576	+12,833,931
Subcontract work performed.....\$		\$1,437,070	\$5,710,083	+4,272,813
New construction.....\$		\$2,813,416	\$9,979,166	+7,165,750
Alterations, maintenance, and repairs.....\$		\$8,623,854	\$5,730,917	-\$2,892,937

¹ Including subcontract work indicated in the lower part of the table.

Table 2 shows the principal statistics of the industry, divided as between public and private employers.

2.—Principal Statistics of the Construction Industry in Canada, by Provinces, 1936.

Group or Province.	Capital Invested.	Em- ployees.	Salaries and Wages.	Cost of Materials.	Values of Work Performed.		
					New Constru- tion.	Alterations and Repairs.	Total.
	\$	No.	\$	\$	\$	\$	\$
GROUP.							
Contractors, builders, etc.	132,449,927	76,834	75,341,968	104,809,637	141,802,644	54,934,799	196,737,443
Municipalities.....	14,720,019	22,278	12,801,383	5,103,036	6,443,157	12,194,729	18,637,886
Harbour Commissions...	3,029,349	1,131	1,194,788	395,758	491,543	1,491,501	1,983,044
Provincial Govt. Depts...	7,979,427	32,253	17,531,905	9,086,305	17,607,633	14,306,575	31,914,208
Dominion Govt. Depts...	6,143,554	9,850	5,976,340	2,794,502	4,300,847	4,466,972	8,767,819
Totals.....	164,322,276	142,346	112,846,384	122,189,238	170,645,824	87,394,576	258,040,400
PROVINCE.							
Prince Edward Island....	231,053	496	370,082	325,684	530,297	285,844	816,141
Nova Scotia.....	6,415,926	10,814	7,721,629	6,143,404	10,234,246	5,200,049	15,434,295
New Brunswick.....	6,675,829	8,276	5,893,831	4,749,916	8,808,421	3,173,832	11,982,253
Quebec.....	48,600,732	39,085	28,996,755	33,067,551	41,688,162	26,213,925	67,902,087
Ontario.....	73,490,073	54,661	46,692,679	52,872,338	73,637,767	34,622,666	108,260,433
Manitoba.....	8,466,861	6,366	5,750,223	6,144,995	8,654,638	4,274,384	12,929,022
Saskatchewan.....	3,708,962	6,317	3,849,407	3,221,387	4,965,053	3,349,615	8,314,668
Alberta.....	4,805,629	5,008	4,360,500	4,197,683	5,287,648	4,324,212	9,611,860
British Columbia and Yukon.....	11,927,211	11,323	9,211,278	11,466,280	16,839,592	5,950,049	22,789,641

The percentage distribution, by provinces, of the principal statistics shown in Table 2 is given below.

3.—Percentage Distribution of the Principal Statistics of the Construction Industry, by Provinces, 1936.

Province.	Capital Invested.	Employees.	Salaries and Wages.	Cost of Materials.	Value of Work Performed.
	p.c.	p.c.	p.c.	p.c.	p.c.
Prince Edward Island.....	0.1	0.3	0.3	0.3	0.3
Nova Scotia.....	3.9	7.6	6.8	5.0	6.0
New Brunswick.....	4.1	5.8	5.2	3.9	4.7
Quebec.....	29.6	27.5	25.7	27.1	26.3
Ontario.....	44.7	38.4	41.4	43.3	42.0
Manitoba.....	5.1	4.5	5.1	5.0	5.0
Saskatchewan.....	2.3	4.4	3.4	2.6	3.2
Alberta.....	2.9	3.5	3.9	3.4	3.7
British Columbia and Yukon.....	7.3	8.0	8.2	9.4	8.8
Totals.....	100.0	100.0	100.0	100.0	100.0

Table 4 classifies the various types of construction carried out in 1936. The item "trade construction" covers such items as brick laying, carpentry, plumbing, heating, electrical work, etc., reported by contractors who confine themselves to a specific type of work. Details by provinces and more complete information on the industry than it is possible to include in the limited space available here, will be found in the Bureau's report on the construction industry for 1936.

4.—Description, Classification, and Value of Construction in Canada, 1936.

Item.	New Construction.	Repairs, Alterations, and Maintenance.	Total Value.
	\$	\$	\$
Building Construction—			
Dwellings and apartments.....	24,774,308	6,491,321	31,265,629
Hotels, clubs, and restaurants.....	1,241,095	633,916	1,875,011
Churches, hospitals, etc.....	8,362,955	853,932	9,216,887
Office buildings, stores, and theatres.....	7,361,987	4,827,884	12,189,871
Grain elevators, factories, warehouses, farm and mine buildings.....	19,318,400	8,205,032	27,523,432
Garages and service stations.....	1,931,188	1,454,304	3,385,492
Government and municipal buildings.....	10,975,920	1,815,813	12,791,733
All other building construction.....	871,579	979,199	1,850,778
Totals, Building Construction.....	74,837,432	25,261,401	100,098,833
Street, Highway, Power, Water, etc., Construction—			
Streets, highways, and parks.....	39,497,176	22,422,428	61,919,604
Bridges, culverts, subways, etc.....	8,260,589	1,803,713	10,064,302
Water, sewage and drainage systems.....	5,297,756	3,329,880	8,627,636
Electric power plants, including dams, reservoirs, transmission lines, and underground conduit.....	10,778,999	4,329,776	15,108,775
Railway construction, steam and electric.....	346,653	361,829	708,482
Structural steel work.....	915,037	21,593	936,630
Wrecking and demolition.....	—	310,709	310,709
All other construction, including installation of boilers and machinery.....	4,890,517	2,372,794	7,263,311
Totals, Street, etc., Construction.....	69,986,727	34,952,722	104,939,449
Harbour and River Construction.....	9,920,389	4,847,559	14,767,948
Trade Construction.....	15,901,276	22,332,894	38,234,170
Grand Totals.....	170,645,824	87,394,576	258,040,400

Table 5 shows the employment and wage-earnings for the construction industry, by provinces. The employment figures, shown on a monthly basis, reflect the fact that the industry is not so decidedly seasonal as is sometimes thought. The month of highest employment in the industry as a whole, in 1936, was August with 163,758 wage-earners and the lowest was January with 71,807.

5.—Average Monthly Employment of Wage-Earners and their Remuneration by Groups and Provinces, 1936.

ANALYSIS BY GROUPS AND MONTHS.

Item.	General and Trade Contractors and Sub-contractors.	Municipalities.	Harbour Com-missions.	Provincial Government Departments.	Dominion Government Departments.	Total.
	No.	No.	No.	No.	No.	No.
EMPLOYMENT.						
January.....	39,162	18,206	790	10,406	3,243	71,807
February.....	37,850	21,074	953	10,344	2,928	73,149
March.....	40,731	21,624	918	13,511	3,278	80,062
April.....	46,771	21,231	1,160	22,614	16,088	107,864
May.....	59,262	20,770	1,060	32,885	9,103	123,080
June.....	68,759	22,367	1,082	39,468	7,463	139,139
July.....	76,517	23,440	1,063	49,522	7,762	158,304
August.....	84,117	22,244	1,106	46,794	9,497	163,758
September.....	84,789	21,265	1,083	41,281	10,308	158,726
October.....	84,626	21,499	1,069	43,598	9,628	160,420
November.....	70,239	19,210	843	30,821	7,209	128,322
December.....	52,161	17,783	800	15,609	4,461	90,814
Monthly Averages of Wage-Earners Em-ployed.....	62,082	20,893	994	29,737	7,581	121,287
	\$	\$	\$	\$	\$	\$
Totals, Wages Paid dur-ing Year.....	55,883,188	10,898,557	924,184	14,800,940	5,068,669	87,575,538
Averages, Wages per Man per annum.....	900	522	930	498	669	722

ANALYSIS BY PROVINCES.

Item.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	No.	No.	No.	No.	No.
Monthly Averages of Wage-Earners Em-ployed.....	448	9,953	7,708	33,983	45,112
	\$	\$	\$	\$	\$
Totals, Wages Paid during Year.....	308,330	6,624,120	5,160,893	22,523,191	34,776,770
Averages, Wages per Man per annum.....	688	666	670	663	771

Item.	Manitoba.	Saskat-chewan.	Alberta.	British Columbia and Yukon.
	No.	No.	No.	No.
Monthly Averages of Wage-Earners Employed.....	5,216	5,626	4,054	9,187
	\$	\$	\$	\$
Totals, Wages Paid during Year.....	4,392,097	3,191,144	3,424,386	7,174,607
Averages, Wages per Man per annum.....	842	567	845	781

Contracts Awarded.—A record of contracts awarded during the years 1911-37, as compiled by MacLean Building Reports, Ltd., is given in Table 6. The aggregate for 1937 was greater than in any year since 1931, and showed an increase of 37·8 p.c. over 1936. It amounted, however, to only 38·9 p.c. of the record year, 1929.

Engineering contracts accounted for 35·1 p.c. of the total value of the contracts awarded in 1937, residential buildings for 25·1 p.c., industrial buildings for 15·1 p.c., and business buildings for 24·7 p.c. As compared with 1936, residential building showed an increase of 31·1 p.c. in value, engineering projects of 17·6 p.c., business construction of 46·3 p.c., while industrial construction increased to the extent of 125·6 p.c. Table 7 shows in some detail the value of the construction contracts awarded in the latest six years.

6.—Summary of the Value of Construction Contracts Awarded in Canada, 1911-37, as Compiled by MacLean Building Reports, Ltd.

Year.	Value of Construction Contracts.	Year.	Value of Construction Contracts.
	\$		\$
1911.....	345,425,000	1925.....	297,973,000
1912.....	463,083,000	1926.....	372,947,900
1913.....	384,157,000	1927.....	418,951,600
1914.....	241,952,000	1928.....	472,032,600
1915.....	83,916,000	1929.....	576,651,800
1916.....	99,311,000	1930.....	456,999,600
1917.....	84,841,000	1931.....	315,482,000
1918.....	99,842,000	1932.....	132,872,400
1919.....	190,028,000	1933.....	97,289,800
1920.....	255,605,000	1934.....	125,811,500
1921.....	240,133,300	1935.....	160,305,000
1922.....	331,843,800	1936.....	162,588,000
1923.....	314,254,300	1937.....	224,056,700
1924.....	276,261,100		

7.—Construction Contracts Awarded in Canada, 1932-37, by Provinces and Types of Construction, as Compiled by MacLean Building Reports, Ltd.

Province.	1932.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	1,071,500	386,900	384,600	414,800	339,900	459,000
Nova Scotia.....	4,009,500	2,880,800	4,993,700	7,903,400	8,073,800	11,220,000
New Brunswick.....	4,258,500	3,951,000	4,590,300	6,055,300	9,495,100	9,878,200
Quebec.....	52,525,300	32,539,200	34,135,500	44,471,900	45,749,500	71,940,800
Ontario.....	49,291,800	42,573,400	63,358,300	70,872,800	72,393,300	97,777,400
Manitoba.....	4,503,500	2,138,000	3,905,000	8,744,400	6,994,400	7,945,100
Saskatchewan.....	2,705,200	775,200	1,563,200	3,841,300	2,200,600	6,704,900
Alberta.....	5,948,200	2,825,900	3,489,400	5,893,000	6,297,400	4,901,000
British Columbia.....	8,558,900	9,219,400	9,391,500	12,108,100	11,044,000	13,230,300
Grand Totals.....	132,872,400	97,289,800	125,811,500	160,305,000	162,588,000	224,056,700

7.—Construction Contracts Awarded in Canada, 1932-37, by Provinces and Types of Construction, as Compiled by MacLean Building Reports, Ltd.—concluded.

Type of Construction.	1932.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$	\$
Apartments.....	1,536,000	903,900	1,641,900	3,249,600	3,921,100	5,815,100
Residences.....	27,356,600	23,025,900	28,946,200	33,158,900	38,936,800	50,391,900
Totals, Residential....	28,892,600	23,929,800	30,588,100	36,408,500	42,857,900	56,207,000
Churches.....	2,736,800	2,052,100	1,827,900	1,698,400	2,625,300	2,662,100
Public garages.....	2,945,400	1,881,400	2,280,300	2,267,600	2,746,100	4,429,800
Hospitals.....	3,985,900	1,879,100	4,977,900	2,979,900	2,127,800	7,425,100
Hotels and clubs.....	1,436,600	1,294,900	1,756,000	2,312,000	2,031,500	2,715,100
Office buildings.....	3,192,600	1,096,100	3,989,300	1,687,900	3,149,000	5,911,600
Public buildings.....	8,174,300	2,784,500	7,012,800	20,243,500	7,126,200	8,066,200
Schools.....	6,749,900	5,391,100	6,161,900	5,429,200	4,133,600	6,378,600
Stores.....	4,742,100	3,629,900	4,127,000	4,374,300	6,625,400	7,315,100
Theatres.....	663,100	483,000	633,600	1,429,600	2,516,000	2,397,600
Warehouses.....	4,772,500	5,784,400	4,713,600	6,019,800	4,690,100	7,987,600
Totals, Business.....	39,399,200	26,276,500	37,480,300	48,442,200	37,771,000	55,288,800
Totals, Industrial....	7,820,400	9,101,900	8,037,900	10,292,200	14,973,700	33,779,800
Bridges.....	7,675,500	6,315,900	5,329,800	3,362,200	7,751,200	7,584,800
Dams and wharves.....	2,777,600	627,500	2,932,800	8,557,800	3,119,400	4,374,800
Sewers and water-mains....	10,638,000	5,577,400	3,873,000	3,715,000	2,515,800	2,946,000
Roads and streets.....	20,019,500	16,509,700	24,432,400	27,421,300	23,649,200	35,840,100
General engineering.....	15,649,600	8,951,100	13,137,200	22,105,800	29,949,800	28,035,300
Totals, Engineering...	56,760,200	37,981,600	49,705,200	65,162,100	66,985,400	78,781,100
Grand Totals.....	132,872,400	97,289,800	125,811,500	160,305,000	162,588,000	224,056,700

Building Permits.—The estimated value of construction in 58 cities of Canada, as indicated by their building permits, is shown for the years 1932 to 1937, inclusive, in Table 8. These cities had in 1931 about 36 p.c. of the population of Canada, while their 1937 building permits aggregated \$55,844,999 or 25 p.c. of the total contracts awarded, as shown in Table 6. In Table 8, the 35 cities for which statistics of building permits are available since 1910 are indicated by an asterisk (*), and the totals for these cities are given beneath the totals for the wider group.

Owing to the increasing use of the automobile and other means of rapid transportation, a growing percentage of those who work in the cities reside outside the municipal boundaries. Hence arises, in part, the necessity for an extension of the record of building permits to include such suburban areas as the York Townships in the case of Toronto, and North Vancouver in the case of Vancouver. South Vancouver and Point Grey were annexed to Vancouver as from Jan. 1, 1929.

The construction contracts in 1937 as shown in Table 7 increased by 37·8 p.c. compared with 1936 and the building permits of 58 cities in Table 8 increased by 35·1 p.c.

8.—Values of Building Permits Taken Out in 58 Cities for the calendar years 1932-37.

NOTE.—Asterisks indicate the 35 original cities, statistics for which are available since 1910.

Province and City.	1932.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	587,000	115,200	87,310	168,395	154,455	140,170
Charlottetown.....	587,000	115,200	87,310	168,395	154,455	140,170
Nova Scotia.....	1,109,753	655,294	835,672	1,619,097	1,320,202	1,929,025
*Halifax.....	933,519	598,909	749,428	1,545,824	1,103,988	1,488,326
New Glasgow.....	35,890	23,060	11,252	18,855	36,818	86,135
*Sydney.....	140,344	33,325	74,992	54,418	179,396	354,564
New Brunswick.....	648,434	394,514	1,277,333	265,115	453,756	602,163
Fredericton.....	18,500	85,115	42,775	19,325	142,220	126,400
*Moncton.....	184,395	143,093	978,228	106,261	100,292	214,608
*Saint John.....	445,539	166,306	256,330	139,529	211,244	261,155
Quebec.....	12,467,878	7,005,774	5,994,676	10,207,383	10,011,608	11,271,918
*Maisonneuve.....	10,557,438	5,648,862	4,098,025	7,455,436	6,905,323	8,217,344
*Montreal.....	1,179,465	724,548	415,308	2,141,695	816,835	915,119
Shawinigan Falls.....	107,230	58,260	184,535	52,137	126,175	414,080
*Sherbrooke.....	229,300	186,400	130,060	314,450	278,700	792,240
*Three Rivers.....	108,075	28,588	465,765	55,555	1,528,197	383,417
*Westmount.....	286,370	359,116	700,983	188,110	356,378	549,718
Ontario.....	16,887,761	9,116,743	14,351,380	23,847,536	19,256,177	28,156,707
Belleville.....	100,705	29,700	76,455	145,602	85,065	150,395
*Brantford.....	170,844	171,783	283,586	272,648	161,602	270,003
Chatham.....	56,215	88,720	55,200	108,931	156,345	192,050
*Fort William.....	294,100	213,400	621,700	152,450	207,500	495,880
Galt.....	88,768	101,256	135,006	388,688	141,226	369,458
*Guelph.....	152,885	108,665	110,078	273,608	100,200	138,267
*Hamilton.....	1,424,300	510,200	772,535	1,887,622	1,466,906	1,694,189
*Kingston.....	349,039	179,667	141,398	213,929	253,398	360,629
*Kitchener.....	363,048	140,233	234,449	589,325	449,123	891,247
*London.....	567,690	551,485	671,840	1,835,110	672,745	949,790
Niagara Falls.....	168,266	43,445	73,540	92,057	141,258	246,436
Oshawa.....	41,314	49,035	50,970	125,300	108,022	218,760
*Ottawa.....	1,549,515	916,065	1,257,000	4,085,140	1,781,555	2,325,445
Owen Sound.....	22,415	38,875	23,885	48,727	173,410	56,847
*Peterborough.....	192,919	133,900	149,238	195,588	269,164	199,686
*Port Arthur.....	284,437	114,815	101,807	163,971	212,671	708,143
Riverside.....	2,525	6,000	3,100	11,475	29,810	109,605
*Stratford.....	50,068	71,662	53,095	50,227	53,105	145,047
*St. Catharines.....	221,566	115,356	151,648	238,694	823,398	793,227
*St. Thomas.....	44,955	64,863	42,261	128,350	79,545	52,106
Sarnia.....	62,404	63,847	127,203	137,052	123,229	192,830
Sault Ste. Marie.....	142,680	93,377	257,340	131,320	226,340	355,950
*Toronto.....	7,862,693	4,415,510	7,496,983	10,005,455	8,182,799	11,258,900
Welland.....	67,650	46,286	108,326	74,609	107,645	231,429
*Windsor.....	921,470	76,842	385,352	709,304	703,907	3,524,699
Woodstock.....	86,933	72,915	67,593	102,223	206,321	214,065
York Townships.....	1,598,357	698,841	899,792	1,680,131	2,339,825	2,011,624

8.—Values of Building Permits Taken Out in 58 Cities for the calendar years 1932-37
—concluded.

Province and City.	1932.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$	\$
Manitoba.....	2,381,433	851,681	833,048	2,945,175	1,559,940	2,543,559
*Brandon.....	33,088	46,821	44,758	111,235	55,211	57,310
St. Boniface.....	218,945	62,660	80,640	110,540	97,279	334,149
*Winnipeg.....	2,129,400	742,200	707,650	2,723,400	1,407,450	2,152,100
Saskatchewan.....	2,374,440	529,497	722,108	1,029,854	640,739	905,029
*Moose Jaw.....	392,542	44,845	350,687	252,260	57,818	191,087
*Regina.....	277,069	376,742	291,696	632,944	358,966	464,041
*Saskatoon.....	1,704,829	107,910	79,725	144,650	223,955	249,901
Alberta.....	2,243,718	947,240	1,262,407	1,686,457	1,966,556	1,828,377
*Calgary.....	917,868	449,917	687,094	874,286	845,287	667,809
*Edmonton.....	1,093,045	428,565	479,108	676,535	895,440	865,560
Lethbridge.....	192,150	54,398	70,110	118,442	200,414	232,298
Medicine Hat.....	40,655	14,360	26,095	17,194	25,415	62,710
British Columbia.....	3,618,980	2,160,553	2,093,590	4,791,611	5,962,260	8,468,051
Kamloops.....	49,435	50,517	34,201	69,652	78,735	58,277
Nanaimo.....	56,269	33,356	49,841	36,856	166,378	231,602
*New Westminster.....	137,712	114,880	77,695	210,490	369,215	541,715
North Vancouver.....	77,455	27,796	14,505	20,250	57,929	68,188
Prince Rupert.....	54,230	29,327	66,420	43,235	63,940	46,694
*Vancouver.....	2,854,206	1,564,541	1,418,816	3,892,665	4,641,545	6,760,880
*Victoria.....	389,673	340,136	432,112	518,463	584,518	760,695
Totals—58 Cities.....	42,319,397	21,776,496	27,457,524	46,560,623	41,325,693	55,844,999
*Totals—35 Cities.....	38,443,406	19,890,150	24,911,430	42,839,627	36,337,439	49,694,847

Table 9 shows the values of the building permits issued by 35 cities in the years 1910-37. The average weighted index numbers of wholesale prices of building materials since 1912 are given, together with index numbers of employment in the construction industries as reported by employers since 1920, both these indexes having been compiled by the Dominion Bureau of Statistics. The average index numbers of wages in the building trades since 1910, as compiled by the Department of Labour, are also given. These indexes show as far as possible the fluctuations in building costs with their effect upon construction work and employment. At various times attempts have been made to determine the relative proportions of material and wage costs in general building; such proportions vary with the type of building and the centres studied, and accurate and representative data are difficult to obtain. However, the results of a survey made in 1934 and published in "Building in Canada" (June, 1934) showed that in fifteen cities the average proportions in all types of construction were 63.6 p.c. for materials and 36.4 p.c. for labour. The reduction in the cost of building operations in the depression years has probably been much more than is indicated by the declines in the indexes of wholesale prices and wages from the relatively high averages shown since the Great War.

9.—Values of Building Permits Issued by 35 Cities in the calendar years 1910-37 and Index Numbers of the Building Construction Industries.

Year.	Value of Building Permits.	Average Index Numbers of—		
		Wholesale Prices of Building Materials.	Wages in the Building Trades.	Employment in Building Construction. ¹
	\$	(1913=100.)		(1926=100.)
1910.....	100,357,546	2	86.9	2
1911.....	138,170,390	2	90.2	2
1912.....	185,233,449	2	96.0	2
1913.....	153,662,842	100.0	100.0	2
1914.....	96,780,981	93.8	100.8	2
1915.....	33,566,749	90.3	101.5	2
1916.....	39,724,466	103.8	102.4	2
1917.....	33,936,426	130.7	109.9	2
1918.....	36,888,270	150.5	125.9	2
1919.....	77,113,413	175.0	148.2	2
1920.....	106,054,379	214.9	180.9	2
1921.....	100,797,355	183.2	170.5	62.1
1922.....	129,338,017	162.2	162.5	60.0
1923.....	117,243,806	167.0	166.4	66.4
1924.....	113,329,707	159.1	169.1	71.2
1925.....	110,314,698	153.5	170.4	75.8
1926.....	143,052,669	149.2	172.1	100.0
1927.....	164,791,231	143.4	179.3	108.7
1928.....	197,566,322	145.3	185.6	112.0
1929.....	214,277,386	147.7	197.5	135.3
1930.....	152,404,222	135.5	203.2	134.3
1931.....	101,821,221	122.2	195.7	104.3
1932.....	38,443,406	115.2	178.2	54.1
1933.....	19,890,150	116.8	158.0	38.5
1934.....	24,911,430	123.1	154.8	47.8
1935.....	42,839,627	121.2	159.8	55.4
1936.....	36,337,439	127.3	160.8	55.4
1937.....	49,694,847	140.8	165.3	60.1

¹ As reported by employers.

² Not available.

The Dominion Bureau of Statistics makes current surveys of the employment afforded by industrial establishments normally employing 15 persons or over. The index of employment in building construction, calculated upon the 1926 average as 100, from data furnished by some 750 employers, averaged 60.1 in 1937, as compared with 55.4 in 1936. The 1937 figure was higher than in any other year since 1931.

Over the period 1911-36, inclusive, or since the beginning of MacLean's record of construction contracts awarded as shown in Table 6, p. 479, there has been an average annual per capita expenditure on construction of about \$30. The period covered includes, of course, the war years and the depression since 1930, as well as the booms of 1911-13 and 1926-30. This average, consequently, is not unreasonably high. For the present population, the annual total of construction, on the basis of this average, should amount to over \$330,000,000. Furthermore, there is undoubtedly an accumulated deficiency in construction from the recent years of sub-normal activity. Some idea may be gained, therefore, of the part which the normal functioning of the construction industry might play in the reduction of unemployment.

CHAPTER XVI.—EXTERNAL TRADE.

This chapter commences with a historical sketch of Canadian external trade, the Canadian tariff, and recent developments in external trade, followed by a brief account of the Commercial Intelligence Service. Thereafter is to be found a treatment of statistics of external trade under ten subordinate headings: value and quantum* of world trade (including Canada's position in world trade); historical statistics of Canadian trade; general analysis of current import and export trade; trade with the United Kingdom and the British Empire; trade with the United States and other foreign countries; geographical distribution of Canadian trade by continents and countries; principal commodities imported and exported; trade in raw and manufactured products; main historical tables and tables showing current trends (Tables 1 to 21); and comparison of the volumes of imports and exports (Table 22). The chapter is finally brought to a close with sections on the tourist trade of Canada, and on Canada's balance of international payments in recent years.

Section 1.—The Development of Tariffs.

The development of tariffs as affecting Canada is here outlined under two divisions: first, a historical sketch showing phases in the growth of Canadian trade which have influenced tariff development; and second, the present tariff relationships with other countries. Owing to the limitations of space in the Year Book, it is impossible to go into detail with such an intricate matter as tariffs. It has therefore been necessary to adopt the policy of confining any detail regarding commodities and countries to tariff relationships at present in force, and to summarize as much as possible historical data and details of preceding tariffs, giving references where possible to those editions of the Year Book where extended treatments can be found.

Subsection 1.—Historical Sketch of External Trade and Tariffs.

In the early history of the American continent each of the European nations establishing settlements in the New World endeavoured to monopolize the commerce of its colonies, prohibited the ships of other nations from resorting to them and prohibited its colonials from importing European goods from other countries, generally granting them, however, preferential treatment in its own market. In these circumstances the colonial wars in America were carried on, by Governments permeated by the mercantile spirit, for "ships, colonies and commerce". Owing to this fact, wars resulting in the transfer of colonies from one European power to another involved great economic as well as political changes in the community so transferred. The traders who had previously controlled the trade between the mother country and its colony found their occupations gone, while new traders from the conquering State arrived to take over the import and export trade, which thereafter flowed in new channels, perhaps no more artificial than those which had previously existed.

Throughout the earlier part of the French *régime* in Canada, the foreign trade of the colony was in the hands of the monopolistic chartered companies, of which the Company of One Hundred Associates was the most notable. When its monopoly was cancelled in 1663, the external trade of Canada still remained a preserve of the

* The term "quantum" is commonly used in international discussions of trade. For this reason it is retained in the analyses of international trade made here, although in line with the common practice in Canada, "volume" is used in the discussion of Canadian trade in Subsection 10.

merchants of Old France. Upon the conquest of the country by the British, the French merchants, who had their offices in Quebec and Montreal, for the most part returned to France, and the trade of the Colony fell into the hands of the traders from England, Scotland, and New England, who had flocked into the country on the heels of the invading armies. Some of their descendants are still among the leading figures in Canadian import and export trade.

For the first sixty years of British rule, Canadian commerce was carried on almost exclusively with or through the United Kingdom, the merchants of New England complaining, after the American Revolution, of being shut out from the Canadian trade. The geographical juxtaposition of the United States to British North America was, however, a factor which could not permanently be ignored, and smuggling became more and more prevalent as settlement extended westward along the International Boundary. In 1822 the United Kingdom made large concessions to United States traders in respect of the Canadian trade. In 1846 she abolished the preferential treatment which she had given to Canadian wheat, and in 1860 all vestige of preference to colonial products disappeared from the British tariff. As a consequence, the colonies which, like Canada, Nova Scotia, and New Brunswick, were by this time enjoying responsible government, could not any longer be refused the right to control their own commercial policy—a fact which was emphasized in an important report prepared in 1859 by the then Minister of Finance, (Sir) A. T. Galt, and forwarded to the British Government. This report declared that the responsibility of the Canadian Government must be to the Canadian people, more especially in matters of taxation (the greater part of the revenue being raised by customs duties), and that the Canadian Government must affirm the right of the Canadian Parliament to adjust the taxation of the people in the way it deemed best, even if this should happen to meet with the disapproval of the British Ministry. This doctrine remained unchallenged by the British Government and, coming at a time when all important parties in the United Kingdom had accepted free trade as a *fait accompli*, it facilitated the setting up in Canada of a protective tariff, designed to secure the establishment in Canada of manufacturing industries, at a time when British opinion desired that the colonies should concentrate their attention on the production of food and raw materials and import from the United Kingdom the manufactured commodities which they required.

The Abolition of Preference and the Reciprocity Treaty of 1854.—The abolition of the British preference on Canadian wheat in 1846 brought about a depression in the flour-milling industry of Montreal and an ephemeral agitation for union with the United States. The effects of the repeal of the preference were, however, mitigated in 1849 by the repeal of the Navigation Acts and the consequent opening of the carrying trade between Canada and the United Kingdom to the shipping of the world. Meanwhile, the abandonment of protection in the Mother Country led to the initiation of negotiations for a reciprocity treaty with the United States. A treaty for the free exchange of natural products between them and the British North American colonies was negotiated in 1854, and became effective on Mar. 16, 1855. From its operation the Canadian farmer and fisherman derived considerable benefit, more especially during the period of the Civil War, when prices in the United States were particularly high. Partly as a consequence of the friction between the United Kingdom and the United States during the Civil War period, and partly because the new Canadian tariff of 1859 shut out the manufactured goods of the United States, the treaty was denounced by the United States at the end of the ten-year period for which it had been negotiated and ceased to operate 12 months

later on Mar. 17, 1866. The denunciation of the treaty had a considerable effect in bringing about the confederation of the British North American colonies, which it was hoped would to a great extent consume each other's products.

Tariff Policy since Confederation.—The immediate effect of Confederation was to abolish the tariff barriers which existed between the provinces entering the Dominion. As the area of Canada increased until, except for Newfoundland and Labrador, it became conterminous with British North America, the area of internal free trade was thereby extended, while protection against outside competition was generally maintained. However, the protective tariff of the old Province of Canada, adopted in 1859 with a prevailing rate of 20 p.c., was replaced in 1866 by a tariff assimilated to the revenue tariffs of the Maritime Provinces, with the rates of duties on the great bulk of manufactured commodities reduced from 20 and 25 p.c. to 15 p.c. Later on, the world-wide depression which commenced in 1873, and the consequent falling-off in a revenue based upon trade, necessitated an increase of the general rate to $17\frac{1}{2}$ p.c., with a 20 p.c. rate on certain luxuries. Even this increase failed to fill the treasury.

In 1879, after the people had declared for a protective policy in the general election of 1878, the duties on imported manufactured goods were considerably increased, the rate on goods "not otherwise provided" being raised from $17\frac{1}{2}$ p.c. to 20 p.c., the rates on cotton goods from $17\frac{1}{2}$ p.c. to rates, specific and *ad valorem* equivalent, on the importations of 1881, to 30 p.c., while the duties on woollens were practically doubled. The rate on furniture and clocks was increased to 35 p.c.; on carriages, glassware, wall-paper and silks, to 30 p.c.; on boots and shoes, buttons, rubber goods and woodenware, to 25 p.c. Pig iron, previously free, now paid \$2 a ton, and the duty on iron billets, bars and rods was increased from 5 p.c. to 10 and $17\frac{1}{2}$ p.c., while manufactured iron and steel products and machinery were given 25 to 35 p.c. protection. Throughout the '80's the general trend of the minor revisions made in the tariff was still upwards, but in the '90's a downward tendency became manifest. In 1891 the duty on raw sugar was repealed, and in 1894 material reductions were made on agricultural implements and minor readjustments on cottons and woollens. This period was also marked by the thorough-going extension of protection to the iron and steel industry, both by customs duties and bounties.

In the tariff revision of 1897, the duties on Indian corn, binder twine, barbed wire, pig iron, flour, and refined sugar were reduced or abolished, while the bounties on domestic pig iron were not reduced but in certain cases increased. But the most distinctive feature of the tariff revision of 1897 was the adoption of what was called a "reciprocal" tariff, one-eighth lower than the general. This reciprocal tariff was at once applied to the United Kingdom, and afterwards to New South Wales and to British India. Belgium and Germany, in virtue of their trade treaties with the United Kingdom, were also admitted to the benefits of the reciprocal tariff, together with Argentina, Austria-Hungary, Bolivia, Colombia, Denmark, Persia, Russia, Sweden, Switzerland, Tunis, and Venezuela, on account of most-favoured-nation treaties between these countries and the United Kingdom, also France and her colonies, in consequence of the Franco-Canadian treaty of 1893. A little later the reciprocal tariff was also extended to the Netherlands, Japan, Siberia, Morocco, Salvador, South African Republic, Tonga, and Spain, under most-favoured-nation treaties between these countries and the United Kingdom.

The numerous concessions mentioned above were, however, of a merely temporary character, ceasing to exist in 1898 as a consequence of the denunciation by the United Kingdom of her most-favoured-nation treaties with Germany and

Belgium. This left Canada free to confine her lower tariff rates to the United Kingdom and to sister Dominions and colonies. A British preferential tariff, consisting at first of a remission of 25 p.c. of the duty ordinarily paid (Aug. 1, 1898), and later of a remission of $33\frac{1}{3}$ p.c. of the ordinary rate of duty (July 1, 1900), was established. This method of preference was abandoned in 1904 for a specially low rate of duty on almost all imported dutiable commodities.

Subsection 2.—Tariff Relationships with Other Countries.*

Tariff relations between Canada and other countries are governed by: (1) application to Canada of some old commercial treaties of Great Britain; (2) participation in commercial treaties of Great Britain by Canadian Acts of Parliament; (3) Canadian Conventions of Commerce or Trade Agreements; (4) Exchange of Notes respecting reciprocal tariff concessions; (5) British preferential rates granted by the Tariff Act; (6) power of extending, by Orders in Council, British preferential or lower rates, intermediate rates, or other reduced duties as compensation for concessions received; (7) authority to impose a surtax on goods from a foreign country whose tariff discriminates against Canadian goods.

EMPIRE COUNTRIES.

Empire Preferences.—The Tariff Act assented to June 13, 1898, by which Canada replaced the Reciprocal Tariff of the year before by a purely British Preferential Tariff, specifically granted the benefit of the new preferential duties to the United Kingdom, Bermuda, British West Indies, and British Guiana. A provision whereby the benefit could be extended to any British possession whose tariff was equally favourable to Canada was at once invoked to give the preferences to British India, Ceylon, Straits Settlements, and New South Wales. In 1904 these preferences were extended to New Zealand, to the colonies now comprising the Union of South Africa, and to Southern Rhodesia, all of which, about that time, had granted newly introduced preferences to Canada. All these countries, except New South Wales, which had ceased to be a separate customs area, were named in the Tariff Act of Apr. 12, 1907 (still in force, in amended form), as being entitled to British preferential rates. The British preference margin, which had been increased in 1900 from one-quarter to one-third, remained at approximately one-third in the 1907 revision, but has since been much varied and enlarged. The 1907 Tariff contains three columns—British Preferential, Intermediate, and General. Sec. 4 of the Tariff Act empowers the Governor in Council to extend British preferential rates, intermediate rates in whole or in part, or most-favoured-foreign-nation treatment to any part of the Empire or British mandated territories.

British preference has been extended to many new areas under Sec. 4. (See p. 520 of the 1934-35 Year Book.) The past year witnessed its further extension (Order in Council Sept. 29, 1937) to Malta, Gilbert and Ellice Islands, British Solomon Islands Protectorate, Nauru, Papua, and Norfolk Island. The Intermediate Tariff was extended to Hong Kong as from Feb. 4, 1933. Orders in Council were passed which accorded most-favoured-foreign-nation treatment to the United Kingdom and the Union of South Africa on July 19, 1935; to Australia and New Zealand on Aug. 21, 1935; to the British West Indies on Oct. 20, 1936; to all the non-self-governing British colonies and protectorates, Palestine, Tanganyika territory, and the territories of Togoland and Cameroons under British Mandate on

* Revised by W. Gilchrist, Chief, Foreign Tariffs Division, Department of Trade and Commerce.

Sept. 29, 1937. Ireland is similarly favoured due to the fact that her Trade Agreement with Canada guarantees to her duties as low as apply to the United Kingdom.

Either by means of the Tariff Act or Trade Agreements with the United Kingdom, Ireland, Australia, New Zealand, Union of South Africa, and British West Indies, Canada now accords her British Preferential Tariff, or lower rates, to almost the whole Empire, including British protectorates and mandated territories. In addition, the products of the Newfoundland fisheries are declared by Sec. 8 of the Tariff Act to be free of customs duty until otherwise determined by Order in Council.

Reciprocal concessions in Empire markets are widespread. Nearly all Canadian products are given tariff preferences when entering Great Britain and Northern Ireland, Australia, New Zealand, British West Indies, Bermuda, British Guiana, British Honduras, Fiji, Southern Rhodesia, Northern Rhodesia (Zambesi Basin), Gambia, Sierra Leone, Seychelles, British Somaliland, St. Helena, Western Samoa, British Protectorate of Tonga, British Solomon Islands, Gilbert and Ellice Islands, Cyprus, Channel Islands, and Isle of Man. To a considerable extent tariff preference is granted to Canadian goods in Ireland, Union of South Africa, Ceylon, Mauritius, and Malta; also, on some goods, in the Federated and Unfederated Malay States, British North Borneo, Sarawak, Brunei, and Cayman Islands. Empire motor cars enjoy preference in Hong Kong and the Straits Settlements; spirits, wines, malt liquors, and tobaccos in Gibraltar; and wines in the Falkland Islands.

United Kingdom.—Canada has granted to the United Kingdom her British Preferential Tariff since its inception in 1897. The United Kingdom, in 1919, introduced preferences for Canada and the rest of the Empire on the limited number of products then comprising her tariff. In subsequent years, with expansion of the tariff, Empire preferences in the United Kingdom extended to more commodities. (See pp. 521-522 of the 1934-35 Year Book.) The Import Duties Act, effective Mar. 1, 1932, imposed a duty of 10 p.c. *ad valorem* on all non-Empire goods not already dutiable or specifically exempted. On the report of an Advisory Committee created by the Act the general rate was increased within two months on many manufactured articles to 15, 20, 25, 30 or 33½ p.c. Less comprehensive Orders issued from time to time have made further increases or changes. The Act exempted products of the Colonial Empire altogether and exempted products of the Dominions, India, and Southern Rhodesia until Nov. 15, 1932. A Trade Agreement between Canada and the United Kingdom signed on Aug. 20, 1932, extended the period of exemption of Canadian goods (see p. 486 of the 1936 Year Book) for five years. The 1932 Agreement has been superseded by one signed Feb. 23, 1937, which renews exemption of Canadian goods from the Import Duties Act, or any other duties not already applicable, with the qualification, as in the previous Agreement, that the United Kingdom, after notification, may impose duty (preferential) on Canadian eggs, poultry, butter, cheese, and other milk products, or in consultation with the Canadian Government may regulate supplies. The United Kingdom grants specified preferences on Canadian wheat, copper, lead, zinc (conditional on Empire producers supplying the demand at world prices); butter, cheese, raw or canned apples, pears, eggs, processed milk, honey, fish, timber, asbestos, and patent leather. The preference margin on Canadian natural silk hosiery was increased, the rate on motor cars and parts stabilized, the duty on reed organs removed, and a fixed preference on tobacco assured until Aug. 19, 1942. Canada obtains the benefit of all British Preferential Tariffs in the Colonial Empire and also exchanges specific preferences with certain colonies. Canada concedes to the United Kingdom reduced duties under 179 tariff items, gives assurance of no upward revision of existing pref-

erential rates under 246 items, and, in the case of 91 items (mainly products of a class not made in Canada), undertakes that margins of preference will not be reduced. If any duty-free Canadian article is exported to the United Kingdom below fair market value in Canada, and the situation, after notification, not corrected, Canadian anti-dumping provisions are to be waived as regards similar United Kingdom goods. The Canadian Government, which is given a quota of 2,500,000 cwt. per annum of bacon and hams, undertakes to assist in the promotion of orderly marketing of these and other meats in the United Kingdom. Either country may suspend or modify scheduled concessions if it is established that, by means of the preference, any organization of exporters controls trade to the prejudice of consumers. Each Government agrees not to increase beyond 50 p.c. the Empire content required for preference in manufactured goods. The 1937 Agreement was approved by the Canadian Parliament on Mar. 31, 1937, implemented by the United Kingdom Budget of Apr. 20, 1937, and formally proclaimed in force from Sept. 1, 1937. It is to remain in force until Aug. 20, 1940, and afterwards until terminated on six months' notice.

Ireland.—Ireland at its inception in 1923 as the Irish Free State, granted Canada any preferential rates in force, and in return received the benefit of the British Preferential Tariff. A formal Trade Agreement between Canada and Ireland, signed Aug. 20, 1932, secured for all goods the produce and manufacture of Canada, the benefits of the lowest rates of duty accorded to similar products of any country. In return, goods the produce or manufacture of Ireland, when imported into Canada, were to be accorded the same tariff treatment as similar goods imported from the United Kingdom.

Australia.—A Trade Agreement between Canada and Australia (superseding a 1925 arrangement of limited scope) was brought into force on Aug. 3, 1931. British Preferential Tariffs were exchanged, with some reservations by Australia, and some additional concessions by Canada. Enlarged margins of preference were also granted by each country on certain products of importance to the other. (See p. 484 of the 1936 Year Book.) The Agreement, which was obligatory for one year, has remained in force subject to six months' notice of denunciation by either Government. During the calendar year 1937 Canada's exports to Australia reached \$30,500,000. Imports from Australia were \$12,000,000. In view of trade balances being so much in Canada's favour, the Australian Government intimated last year that if the Agreement was to continue, further Canadian concessions should be accorded Australian products. After negotiations, the Canadian duties on certain Australian goods were reduced by Order in Council effective Oct. 1, 1937, and the Trade Agreement was kept in force, subject, as before, to denunciation on six months' notice by either Government.

New Zealand.—Canada was granted the British preferential rates of the New Zealand Tariff established in 1903. Canada has extended her British Preferential Tariff to New Zealand since 1904. On Oct. 1, 1925, Canadian special rates then granted Australia were also extended to New Zealand, but withdrawn on Oct. 12, 1930. As from June 2, 1931, New Zealand cancelled nearly all her British preferential rates to Canada. On May 24, 1932, a new Trade Agreement was brought into force for one year (applicable also to Western Samoa and Cook Islands), whereby Canada granted New Zealand some rates lower than British preferential, and otherwise the British Preferential Tariff. New Zealand restored the British preferential rates to Canada except for 6 items upon which intermediate rates were conceded. A New Zealand surtax of 22½ p.c. of duty (in a few instances 5 p.c.) insti-

tuted on Aug. 18, 1930, was cancelled by a New Zealand tariff amendment of Nov. 19, 1932, as regards all Empire goods except those from Canada, Union of South Africa, Irish Free State, Newfoundland, and India. The 1932 Trade Agreement was made for one year, but has been kept in force by various renewals. It would have expired on Sept. 30, 1937, and, in order to secure a further renewal, New Zealand was granted certain reductions in Canadian duty including some being accorded to Australia. The Agreement was then renewed to Sept. 30, 1938, by Order in Council of Oct. 1, 1937. New Zealand, as from Mar. 1, 1938, increased some rates against Canada, Australia, and foreign countries on the ground that her manufacturing costs had increased.

Union of South Africa.—In addition to the British Preferential Tariff which Canada accords to the Union of South Africa under the Tariff Act of 1907, commerce with the Union of South Africa is governed by a Trade Agreement signed Aug. 20, 1932. It provides for exchange of preferential treatment on selected commodities. (See p. 487 of the 1936 Year Book.) By an Exchange of Notes (Union of South Africa dated Aug. 2, 1935; Canada dated Aug. 31, 1935) effective July 1, 1935, each Dominion assures the other of as low rates as apply to the goods of any foreign country.

Southern Rhodesia.—A Trade Agreement signed Aug. 20, 1932, exchanging preferences on a few selected commodities and each country's British Preferential Tariffs on nearly all other commodities, was terminated as from Jan. 2, 1938, on notice by Southern Rhodesia. Canadian goods are now accorded an Intermediate Tariff in Southern Rhodesia, and Canada, under the Tariff Act of 1907, applies her British Preferential Tariff to Southern Rhodesian goods.

British West Indies.—Under the Canadian Customs Tariff Act, 1907, the British Preferential Tariff applies to the British West Indies, Bermuda, and British Guiana, and by Order in Council effective Feb. 1, 1913, to British Honduras. Special tariff concessions were made to the British West Indies in a reciprocal Trade Agreement of 1912, enlarged in 1920. The latter was replaced on July 6, 1925, by an Agreement still more extensive and brought formally into force by proclamation as from April 30, 1927. It is binding for a 12-year period and thereafter until terminated, on a year's notice. It includes: Jamaica, Trinidad, Barbados, Bahamas, Leeward Islands, Windward Islands, Bermuda, British Guiana, and British Honduras. (For further details see p. 484 of the 1936 Year Book.)

FOREIGN COUNTRIES.

The power given under Sec. 4 of the Tariff Act to extend the Intermediate Tariff, in whole or in part, by Order in Council, to British countries, applies equally to foreign countries. Another important means of arranging for reciprocal concessions from foreign countries is afforded by Sec. 11 of the Customs Tariff which authorizes the making by Order in Council of such reductions of duties on goods imported into Canada from any other country as may be deemed reasonable by way of compensation for concessions granted by any such country. On the other hand, power is given under Sec. 7 to impose a surtax of 33½ p.c. *ad valorem* on goods from any foreign country which treats imports from Canada less favourably than those from other countries.

Most-Favoured-Nation Treatment.—Mutual guarantee of most-favoured-foreign-nation treatment, or, as it is commonly called, most-favoured-nation treatment, enters into many of the tariff arrangements between Canada and foreign

countries. Usually, this means that Canada and the other contracting State agree that each party will accord to the goods of the other the benefit of the lowest duties applied to similar goods of any other foreign origin. There may be reservations. These reservations are likely to be tariff advantages, not relatively of far-reaching importance, such as one State may grant to another on historical, political, or geographical grounds, or some other special relationship. The concessions arising out of most-favoured-nation treatment under the Canadian tariff now consist of the rates of the Intermediate Tariff, and lower rates on some goods provided in Trade Agreements with France, the United States, and Poland. It will be seen that the guarantee by Canada of most-favoured-nation treatment to a foreign country does not entitle the foreign country to preferences existing only under the British Preferential Tariff or an Empire Trade Agreement. In other words, Empire preferences are confined within the Empire.

The benefit to Canadian exports of most-favoured-nation treatment in any country depends on the customs and treaty system of the particular importing country concerned. Several foreign nations have maximum and minimum schedules, meaning that there are two scales of duties for practically all goods imported. There may be also an intermediate scale of duties. Some countries maintain reduced duties only on specified items of their tariffs, which they have conceded in one or more commercial treaties. A country, too, may adhere strictly to a single-column tariff. Even when it makes concessions in a commercial treaty it may incorporate these in the normal tariff, thus discriminating against no country. The number of countries maintaining uniform tariffs regardless of the origin of goods, however, is becoming smaller from year to year. The benefit of most-favoured-nation treatment would, of course, depend also on the extent to which tariff favours apply to countries competing in the market in question. It has been the practice to include import restrictions when bargaining for most-favoured-nation treatment but the significance of this is greatly lessened in recent years by countries administering import quotas independently of most-favoured-nation commitments.

Argentina.—A Treaty of Amity, Commerce and Navigation between Great Britain and Argentina, signed Feb. 2, 1825, exchanging most-favoured-nation treatment is still applicable to the tariff relations between Canada and Argentina. Argentine customs duties, with minor exceptions, apply equally to imports from all countries. Extensive tariff reductions made in an Agreement of Sept. 26, 1933, with the United Kingdom, have been extended to imports from all countries.

Austria.—An Exchange of Notes, July 6-8, 1933, and Canadian Orders in Council of July 5, 1933, Dec. 29, 1933, and Jan. 14, 1935, the latter for an indefinite period, granted the Canadian Intermediate Tariff in return for most-favoured-nation treatment in Austria. Many important items of the Austrian Tariff were subject to conventional or reduced rates of duty which applied to countries having such treaty relationship with Austria.

Belgium.—A Convention of Commerce between Canada and Belgium, signed July 3, 1924, provided for exchange of most-favoured-nation treatment of each other's goods. The Belgian Tariff consists of a Minimum Tariff and a Maximum Tariff (three times the minimum). The Minimum Tariff, however, is in practice applied equally to imports from all countries.

Bolivia.—Article 15 of the Treaty of Commerce of Aug. 1, 1911, between the United Kingdom and Bolivia, was accepted by Canadian Order in Council of July 20, 1935, the effect being an arrangement between Canada and Bolivia for exchange

of most-favoured-nation treatment of each other's goods. Customs duties in Bolivia are applied equally to imports from all countries.

Brazil.—On account of Brazilian policy to cancel old Trade Agreements, an arrangement was made between Canada and Brazil by Exchange of Notes, July 25-30, 1936, granting the Canadian Intermediate Tariff for the Brazilian Minimum or lowest tariff. This arrangement continued the former reciprocal relationship between the two countries. It was superseded by an Exchange of Notes of June 12, 1937, providing for the mutual concession of most-favoured-nation treatment in tariff matters. The Tariff of Brazil consists mainly of a Minimum Tariff and a General Tariff, approximately one-quarter higher. Some rates lower than the minimum, established by an Agreement of Feb. 2, 1935, with the United States, apply to imports from countries enjoying most-favoured-nation treatment.

Colombia.—A Treaty of Friendship, Commerce and Navigation between the United Kingdom and Colombia, signed Feb. 16, 1866, requires Colombia and Canada to give each other most-favoured-nation treatment in tariff matters. An Agreement between Colombia and the United States, signed Sept. 13, 1935, created many reduced Colombian duties, to which treaty countries became entitled. Otherwise Colombian duties apply equally to imports from all countries.

Costa Rica.—A Costa Rican law of Feb. 16, 1933, established a surcharge of 30 p.c. of the duty on imports from countries not granting most-favoured-nation treatment to Costa Rica. Reduced duties appeared in an Agreement with the United States signed Nov. 28, 1936. An Exchange of Notes of Mar. 1-2, 1933, with the United Kingdom, set forth that Costa Rica would extend most-favoured-nation rates to any part of the British Empire on a reciprocal basis. A Canadian Order in Council of July 20, 1935, extended most-favoured-nation treatment to Costa Rica, thus entitling Canadian goods to a reciprocal concession in Costa Rica.

Czechoslovakia.—A Convention of Commerce between Canada and Czechoslovakia of Mar. 15, 1928, exchanged most-favoured-nation treatment in tariff matters. Czechoslovakia has conventional or reduced duties on many goods.

Denmark.—Danish Treaties of Peace and Commerce with Great Britain of Feb. 13, 1660-1, and July 11, 1670, establishing reciprocal most-favoured-nation treatment of each other's goods, still apply to the tariff relations between Canada and Denmark. Although Denmark has a single-tariff schedule, which is applicable to all countries, provision is made for penalty duties against countries which discriminate against her.

Estonia.—Article 28 of the United Kingdom-Estonia Treaty of Commerce and Navigation of Jan. 18, 1926, providing means for a most-favoured-nation arrangement between Canada and Estonia, was accepted by the Canadian Trade Agreements Act of June 11, 1928. The duties of the Estonian Minimum Tariff are half those of the General Tariff, while on some goods conventional rates lower than the Minimum Tariff exist.

Finland.—Article 23 of the United Kingdom-Finland Treaty of Commerce and Navigation of Dec. 14, 1923, providing means for exchange of most-favoured-nation treatment between Canada and Finland, was accepted by the Finland Trade Agreement Act of June 12, 1925. Finland has in force some conventional rates lower than her General Tariff.

France.—The Franco-Canadian Trade Agreement of 1922 having lapsed on June 16, 1932, negotiations for a new Agreement ensued and were concluded by the signing of a Trade Agreement on May 12, 1933. This Agreement was brought into

force as from June 10, 1933. Under its terms Canada was accorded the rates of the French Minimum Tariff and most-favoured-nation treatment on 185 items or parts of items and reductions varying from 17 p.c. to 73 p.c. of the General Tariff on 24 items or parts. The French General Tariff is, for most goods, four times the Minimum Tariff. Intermediate rates are expressed as varying percentage reductions from the General Tariff. In return Canada conceded to France a rate as low as British preferential on 7 items, reductions from the Intermediate Tariff of from 10 p.c. to 25 p.c. on 95 items and Intermediate Tariff rates on an extensive list of items. The French colonies are included within the scope of the Agreement. The Agreement was supplemented by a Protocol of Feb. 26, 1935, and Notes exchanged Mar. 20, 1936, and July 30, 1937, under which Canada secured the Minimum Tariff on 25 more items of the French Tariff, in return for adjustments of duty on some French products. These supplementary arrangements also made provision for quotas on many Canadian articles of which the import into France is subject to quantitative restrictions.

Germany.—In the absence of a commercial agreement, a 'Super Tariff' (*Obertariff*) created by a German law of Jan. 18, 1932, two to four times as high as the General Tariff, on goods affected, was invoked against Canada on Apr. 1, 1932. On account of negotiations that ensued, the Super Tariff was suspended on July 1, 1932, for six months. By Exchange of Notes effective Jan. 1, 1933, an Agreement, for the duration of three months, was entered into, giving Germany the Canadian Intermediate Tariff in return for its ordinary General Tariff and any existing conventional duties. This arrangement was renewed, first for nine months, and on Jan. 1, 1934, for an indefinite period, subject to termination on six months' notice. A Provisional Trade Agreement, including exchange of most-favoured-nation treatment, was signed on Oct. 22, 1936, to become effective fourteen days after exchange of ratifications, and to remain in force until Nov. 14, 1937, and thereafter until terminated on two months' notice. A Canadian Act ratifying the Agreement was assented to on Apr. 10, 1937. On account of the control exercised by Germany over exchange for payment of goods, a Payments Agreement was also entered into on Oct. 22, 1936. It authorized utilization of definite percentages of exchange accruing from German exports to Canada for purchase of Canadian wheat, apples, cheese, honey, fish, fox skins, asbestos, lumber, wood-pulp, sausage casings, and some other goods. Unallocated exchange is available for miscellaneous purchases. By Exchange of Notes on the day the Trade Agreement was signed, Canada agreed, on a basis of reciprocity, to give effect to the Trade Agreement as from Nov. 15, 1936, the Payments Agreement having gone into force on that day. The Exchange of Notes is to remain operative until replaced by the Provisional Trade Agreement or until terminated on six weeks' notice.

Guatemala.—A Guatemalan law of Jan. 25, 1936 (renewing with slight changes a surtax law of Jan. 26, 1935), provided for increasing by 100 p.c. the customs duties on goods from countries whose trade balances are adverse to Guatemala and who had increased their exports to Guatemala by 100 p.c. or more in 1935 as compared with 1934. A Trade Agreement between Canada and Guatemala signed Sept. 28, 1937, by exchange of most-favoured-nation treatment, exempted Canadian goods from the customs surcharge and entitled Canada to reduced duties provided for some items in a Guatemalan Agreement of Apr. 24, 1936, with the United States. Pending ratification of the Agreement, an Exchange of Notes on the same date established most-favoured-nation treatment reciprocally as from Oct. 14, 1937. An Act approving the Agreement was given third reading in the Canadian House of Commons on Apr. 26, 1938.

Haiti.—Haiti reduced duties on some United States products in a Trade Agreement of Mar. 28, 1935, and on Apr. 9, 1935, adopted a new Maximum Tariff (double the Minimum) which would have applied to Canada, only that by Exchange of Notes of June 10, 1935, renewed Apr. 6, 1936, and Apr. 15, 1937, Canada and Haiti exchanged most-favoured-nation treatment in tariff matters. A Canadian-Haiti Trade Agreement signed Apr. 23, 1937, includes this tariff arrangement and now (May, 1938) awaits exchange of ratifications. An Act approving the Agreement was given third reading in the Canadian House of Commons on Apr. 26, 1938.

Hungary.—Article 20 of the United Kingdom-Hungary Treaty of Commerce and Navigation of July 23, 1926, affording means for exchange of most-favoured-nation treatment in tariff matters between Canada and Hungary, was accepted by the Canadian Trade Agreements Act of June 11, 1928. Hungary has in force various conventional rates lower than her General Tariff, resulting from treaties with other countries.

Italy.—A Convention of Commerce between Canada and Italy of Jan. 4, 1923; provided for exchange of most-favoured-nation treatment in tariff matters. The General Tariff of Italy is applicable to imports from all countries except where reduced rates for many goods have been established by commercial treaties.

Japan.—A Treaty of Commerce and Navigation between the United Kingdom and Japan on a most-favoured-nation basis signed April 3, 1911, was accepted by Canada (with minor provisos) in an Act of April 10, 1913. Certain surtaxes were imposed by Japan on July 20, 1935, and by Canada on Aug. 5, 1935, against each other's goods. An Exchange of Notes on Dec. 26, 1935, effected the removal of the surtaxes by both countries and stated the basis for Canadian customs valuations on Japanese goods. (See p. 489 of the 1936 Year Book.)

Latvia.—Article 26 of the United Kingdom-Latvia Treaty of Commerce and Navigation of June 22, 1923, providing means for exchange of most-favoured-nation treatment in tariff matters between Canada and Latvia, was accepted by the Canadian Trade Agreements Act of June 11, 1928. Latvia has a minimum schedule of duties and a maximum schedule twice as high, as well as some rates of duty fixed by conventions with other countries.

Lithuania.—Article 4 of the United Kingdom-Lithuania Agreement of May 6, 1922, providing means for exchange of most-favoured-nation treatment in tariff matters between Canada and Lithuania, was accepted by the Canadian Trade Agreements Act of June 11, 1928. Lithuania has in force a Maximum Tariff on certain specified items double the ordinary Tariff. Resulting from treaties on a few items there are rates lower than the ordinary Tariff.

Netherlands.—A Canadian-Netherlands Convention of Commerce of July 11, 1924, provided for exchange of most-favoured-nation treatment in tariff matters between Canada, Netherlands, Netherlands India, Surinam, and Curaçao. The Netherlands Tariff consists of a single schedule of duties, without tariff preference to any country.

Norway.—A Convention of Commerce and Navigation between the United Kingdom and Norway (and Sweden) of Mar. 18, 1826, is applicable to British territories to the extent of still providing exchange of most-favoured-nation treatment in tariff matters between Canada and Norway. Norway has a single-tariff schedule but there exist provisions for imposing penalty duties on non-reciprocating countries.

Panama.—Article 12 of a United Kingdom-Panama Treaty of Commerce and Navigation, signed Sept. 25, 1928, affording means for reciprocal most-favoured-

nation relations with Panama, was accepted by Canadian Order in Council of July 20, 1935. A Canadian Order in Council of Dec. 29, 1936, conceded the Canadian Intermediate Tariff to the Panama Canal Zone. Duties in Panama apply equally to imports from all countries.

Poland.—A Convention of Commerce between Canada and Poland, signed July 3, 1935, effective Aug. 15, 1936, exchanged most-favoured-nation treatment and, as regards scheduled goods, granted reductions from the Canadian Intermediate Tariff and from the lowest Polish tariff. The Polish Tariff comprises two columns of rates for all goods, the rates of Column I being about 25 p.c. higher than the rates of Column II. On some goods there are conventional rates resulting from trade treaties which Poland has concluded with other countries and which are lower even than the rates of Column II. The Free City of Danzig was declared party to the Convention from Jan. 1, 1937.

Portugal.—Article 21 of the Treaty of Commerce and Navigation between the United Kingdom and Portugal, signed Aug. 12, 1914, providing for exchange of most-favoured-nation treatment in tariff matters, was accepted in the Canadian Trade Agreements Act of June 11, 1928. The Portuguese Tariff has maximum and minimum scales, the treaty arrangement securing the minimum for Canada.

Roumania.—Article 36 of the Treaty of Commerce and Navigation between the United Kingdom and Roumania of Aug. 6, 1930, affording means for exchange of most-favoured-nation treatment between Canada and Roumania, was utilized in an Exchange of Notes of Sept. 30, 1930. Roumania has a Minimum Tariff on some commodities, one-third lower than her General Tariff, also, as a result of treaties, reductions from the Minimum Tariff on certain goods.

Russia.—A Canadian Order in Council of Feb. 27, 1931, prohibiting importation from the Union of Soviet Socialist Republics of coal, wood-pulp, pulpwood, lumber, asbestos, and dressed furs, was cancelled, by an Order in Council of Sept. 10, 1936, in consequence of which the Soviet Union repealed an Order of Apr. 20, 1931, which had prevented her importing organizations and trade representatives from purchasing Canadian goods or chartering Canadian vessels.

Salvador.—By Exchange of Notes of Nov. 2, 1937, Canada and El Salvador granted each other most-favoured-nation treatment in tariff matters. The Tariff of El Salvador consists of a Maximum Tariff, a Minimum Tariff (one-third the maximum) and some conventional rates lower than the minimum.

Spain.—A Treaty of Commerce and Navigation between the United Kingdom and Spain, signed Oct. 31, 1922 (revised Apr. 5, 1927), providing for exchange of most-favoured-nation treatment in tariff matters, was accepted on behalf of Canada by the Spanish Treaty Act of June 11, 1928. The Tariff of Spain consists of a First (the highest) Tariff, a Second Tariff (usually one-third of the first) and some conventional rates lower than the Second.

Sweden.—A Convention of Commerce and Navigation between the United Kingdom and Sweden (and Norway) of Mar. 18, 1826, had the effect of establishing most-favoured-nation tariff relationship between Canada and Sweden. Sweden, in commercial treaties with various countries, has granted conventional rates of duty which, however, have been incorporated into the ordinary tariff and made applicable to all countries.

Switzerland.—Under the Treaty of Friendship, Commerce and Reciprocal Establishment between the United Kingdom and Switzerland of Sept. 6, 1855,

Canada and Switzerland exchanged most-favoured-nation treatment of each other's goods. Switzerland has reduced some of her rates in treaties, but reductions are incorporated in a single-column tariff which applies to all countries.

United States.—A Trade Agreement between Canada and the United States was signed on Nov. 15, 1935. It exchanged unconditional most-favoured-nation treatment with reservation of Canada's Empire preferences and the United States preferences granted to Cuba, Philippine Islands, and the Panama Canal Zone. Further Canadian concessions to the United States included reductions in duty on 88 tariff items, modification of customs valuation, and reciprocating United States action in exempting from duty purchases up to \$100 made by returning Canadian residents. The United States schedule of reduced rates to Canada included: cattle (quota), cream (quota), seed potatoes (quota), clover and grass seeds, hay, turnips, maple sugar; certain classes of fish; lumber and timber (quota) previously subject to duty and excise; feldspar, talc, lime, various ferro-alloys, acetic acid, certain pulpboard, whisky, and patent and harness leather. Reductions on these goods are, with regard to 27 tariff items, 50 p.c.; 32 items, 25 to 49 p.c.; 8 items, reduction under 25 p.c. or existing rate confirmed. Among 21 items which were guaranteed continuance of duty-free entry were newsprint, wood-pulp and pulpwood, shingles (quota), and lobsters. Tariff reductions became operative on Jan. 1, 1936. The Agreement was approved by the Canadian Parliament on Apr. 8, 1936. Upon exchange of ratifications on May 14, 1936, the whole Agreement went into force. It continues subject to certain contingencies to Dec. 31, 1938, and thereafter until terminated on six months' notice. This Agreement was the seventh entered into by the President of the United States under an amendment to the Tariff Act of 1930, known as the Reciprocal Trade Agreements Act of June 12, 1934. Up to Mar. 7, 1938, ten others were signed, the reduced duties in each, except the one with Cuba, being accorded to Canada. The Trade Agreements Act was passed for only three years but on Mar. 1, 1937, was extended for a further three years.

Uruguay.—Canada signed an Agreement, on a most-favoured-nation basis, with Uruguay on Aug. 12, 1936, as regards customs duties, quotas, and allocation of exchange for commercial transactions, to come into force 30 days after exchange of ratifications, and to remain in force for three years and thereafter until termination on six months' notice. A Canadian Act ratifying the Agreement was assented to on Apr. 10, 1937. The Agreement awaits ratification by Uruguay. Notes were exchanged at the same time, effective at once, granting the Canadian Intermediate Tariff in return for Uruguayan trading facilities for Canadian exports, pending the coming into force of the formal Agreement. Provision exists under the tariff of Uruguay whereby duties may be increased by 50 p.c. on imports from countries which do not offer reciprocity, or do not accord most-favoured-nation treatment to Uruguayan goods.

Venezuela.—A Treaty of Amity, Commerce and Navigation between the United Kingdom and Colombia (of which Venezuela was then part) of Apr. 18, 1825, applies to Canada and provides for exchange of most-favoured-nation treatment. The Venezuelan Executive Power is authorized to increase duties up to 100 p.c. on certain goods originating in a specified country, but it has not been learned that this power has been used. A limited number of reduced Venezuelan duties are provided in a Trade Agreement of Aug. 6, 1936, between France and Venezuela. Otherwise no preferences exist under the Venezuelan Tariff.

Yugoslavia.—Article 30 of the United Kingdom-Serb-Croat-Slovene Kingdom Treaty of Commerce and Navigation of May 12, 1927, (affording means for exchange

of most-favoured-nation treatment of each other's goods between Canada and Yugoslavia) was accepted by means of the Canadian Trade Agreements Act of June 11, 1928. The Yugoslavian Tariff comprises maximum, minimum, and conventional duties (usually incorporated in the minimum duties).

Section 2.—The Commercial Intelligence Service.*

The Commercial Intelligence Service, maintained by the Department of Trade and Commerce, is designed to further the interests of Canadian trade in other parts of the Empire and in foreign countries. To this end there are established throughout the world offices administered by Trade Commissioners. These Trade Commissioners make periodical reports upon trade and financial conditions, variations in markets, and the current demand or opportunities for Canadian products. They also secure and forward to the Department in Ottawa specific inquiries for Canadian goods and in general exert their best efforts for the development and expansion of overseas markets.

Organization at Ottawa.—Besides the overseas organization of the Commercial Intelligence Service, there is a headquarters staff at Ottawa. This is presided over by a Director, who is the head of the Service and administers and unifies the work assigned to the various Trade Commissioners. Assisting the Director are the following divisions: Directories—where inquiries for Canadian products, forwarded by the Trade Commissioners, are prepared for publication and distribution, and the Exporters Directory listing Canadian exporters with their agents abroad, commodities handled, ratings, cables and codes used, etc., and the Foreign Importers Directory are kept up to date; Editorial—where the Commercial Intelligence Journal is compiled; Commodity Records—where information regarding markets for Canadian export commodities is indexed; Economics; Animal and Fish Products; Vegetable Products; Metals and Chemical Products; Forest Products; and Miscellaneous Manufactures. These last five divisions handle correspondence falling within their respective classifications.

Also, in order to keep abreast of Canadian industrial development, each Trade Commissioner makes a periodic tour of Canada and while in this country gives first-hand information to the Canadian manufacturer regarding opportunities and conditions of trade in his territory.

Organization Abroad.—A list of the countries in which Canadian Trade Commissioners are located, showing territory covered, name, post office, and cable address of the Trade Commissioner in each case is given below:—

CANADIAN GOVERNMENT TRADE COMMISSIONERS.

NOTE.—This list was revised as at Jan. 1, 1938. Cable address of Trade Commissioners is "Canadian" unless otherwise stated.

<i>Argentine Republic</i> (Territory includes Uruguay).	J. A. Strong, B. Mitre 430, Buenos Aires (1).
<i>Australia</i> — Sydney (Territory covers Federal District of Canberra, New South Wales, Queensland, Northern Territory and Dependencies.)	L. M. Cosgrave. Address for letters—P.O. Box No. 3952V. Office—City Mutual Life Building, Hunter and Bligh Streets.
Melbourne (Territory covers States of Victoria, South Australia, Western Australia, and Tasmania.)	Frederick Palmer. Address for letters—Box 196C, G.P.O. Office—Safe Deposit Office Building, Melbourne.
<i>Belgium</i>	Yves Lamontagne, Shell Building, 60 Ravenstein Street, Brussels.
<i>Brazil</i>	L. S. Glass. Address for letters—Caixa Postal 2164, Rio de Janeiro. Office—Ed. Da "A Noite", Sala 802, Praça Maua.

* Revised by I. D. Wilgress, Director, Commercial Intelligence Service, Department of Trade and Commerce.

CANADIAN GOVERNMENT TRADE COMMISSIONERS—continued.

- British Malaya* (Territory includes the Straits Settlements, the Federated and Unfederated Malay States, British Borneo, Northern Sumatra, Siam, and Netherlands Indies.)
- British West Indies*—
Trinidad (Territory includes Barbados, Windward and Leeward islands and British Guiana.)
Jamaica (Territory covers Jamaica, Haiti, the Bahamas, and British Honduras.)
- China*—
Shanghai (Territory includes North and Central China and Manchuria.)
- Cuba* (Territory includes Dominican Republic and Puerto Rico.)
- Egypt* (Territory includes the Sudan, Palestine, Cyprus, Iraq, Syria, Persia, Greece, Turkey, Bulgaria, and Roumania.)
- France* (Territory includes French Colonies in North Africa.)
- Germany* (Territory covers Germany—except the Rhine Valley—Czechoslovakia, Austria, Hungary, Poland, Lithuania, Latvia, and Estonia.)
- Hong Kong* (Territory includes South China, the Philippines, and Indo-China.)
- India and Ceylon*.....
- Irish Free State and Northern Ireland*.....
- Italy* (Territory includes Spain, Portugal, Gibraltar, Malta, Albania, and Jugoslavia.)
- Japan*—
Tokyo.....

Kobe.....
- Mexico* (Territory includes Guatemala, Honduras, and Salvador.)
- Netherlands* (Territory includes the Rhine Valley and Switzerland.)
- New Zealand* (Territory includes Fiji and Western Samoa.)
- Norway* (Territory includes Scandinavian countries and Finland.)
- Panama* (Territory includes the Canal Zone, Venezuela, Colombia, Nicaragua, and Costa Rica.)
- Peru* (Territory includes Bolivia, Chile, and Ecuador.)
- South Africa*—
Cape Town (Territory includes Cape Province and Southwest Africa, Natal, Tanganyika, Kenya, Uganda, Mauritius, and Madagascar.)
- Johannesburg (Territory includes Transvaal, Orange Free State, Bechuanaland, Somaliland, the Rhodesias, Portuguese East Africa, Mozambique, and Nyasaland.)
- United Kingdom*—
London.....

London (Territory covers Home Counties, South-eastern Counties, and East Anglia.)
- B. C. Butler, Union Building, Singapore, Straits Settlements.
- M. B. Palmer. Address for letters—P.O. Box 125, Port of Spain. Office—Colonial Bank Building.
- F. W. Fraser, P.O. Box 225. Office—Canadian Bank of Commerce Chambers, Kingston.
- H. A. Scott. P.O. Box 264, Shanghai. Office—Ewo Building, 27 The Bund, Shanghai.
- C. S. Bissett. Address for letters—Apartado 1945, Havana. Office address—Royal Bank of Canada Building, Calle Aguiar 75, Havana.
- Henri Turcot. Address for letters—P.O. Box 1770, Cairo. Office—22 Shari Kasr el Nil, Cairo.
- Hercule Barré, Commercial Attaché, 3 rue Scribe, Paris (9). Cable address—Cancomac.
- J. C. McGillivray, Mönckebergstrasse 31, Hamburg.
- V. E. Duclos. Address for letters—P.O. Box 80, Hong Kong. Office—Hong Kong and Shanghai Bank Building, Hong Kong.
- Paul Sykes. Address for letters—P.O. Box 2003, Calcutta. Office—23 Esplanade Mansions, Government Place East, Calcutta.
- James Cormack, 66 Upper O'Connell Street, Dublin, Irish Free State; and 44 Ann Street, Belfast, Northern Ireland. Cable address—Adanac.
- A. B. Muddiman, Via Manzoni Nr. 5, Milan (102).
- C. M. Croft, Commercial Secretary. Address for letters—P.O. Box 401, Tokyo Central. Office—Canadian Legation, 16 Omotecho, 3-chome, Akasakaku, Tokyo.
- P. V. McLane. Address for letters—P.O. Box 230, Kobe. Office—309 Crescent Building, 72 Kyo-machi.
- R. T. Young. Address for letters—Apartado Num. 126-bis, Mexico City. Office—Edificio Banco de Londres y Mexico, Num. 30, Mexico City. Cable address—Cancoma.
- James Langley, Coolsingel 111b, Rotterdam.
- W. F. Bull. Address for letters—P.O. Box 33, Auckland. Office—Yorkshire House, Shortland Street, Auckland.
- Richard Grew. Address for letters—Stortingsgaten 28, Oslo.
- W. J. Riddiford. Address for letters—P.O. Box 222, Panama City. Office—Royal Bank of Canada Building, Santa Ana Plaza, Panama City.
- M. J. Vechsler. Address for letters—Casilla 1212, Lima. Office—Portal de Belen No. 166, Plaza, San Martin, Lima.
- G. R. Heasman. Address for letters—P.O. Box 683, Cape Town. Office—Cleghorn and Harris Building, Adderley Street, Cape Town. Cable address—Cantracom.
- J. L. Mutter. Address for letters—P.O. Box 715. Office—Prudential Assurance Building, 92 Fox St., Johannesburg. Cable Address—Cantracom.
- Frederic Hudd, Chief Trade Commissioner in the United Kingdom, Canada House, Trafalgar Square, S.W. 1. Cable Address—Sleighing, London.
- J. H. English, Canada House, Trafalgar Square, S.W. 1.

CANADIAN GOVERNMENT TRADE COMMISSIONERS—concluded.

United Kingdom—concluded.

London (Territory—for fresh fruit only—covers United Kingdom, Norway, Denmark, Sweden, France, Holland, Belgium, and Germany.)

W. B. Gornall, Fruit Trade Commissioner, Aldine House, Bedford Street, Strand, W.C. 2. Cable address—Canfrucum.

London.....

W. A. Wilson, Animal Products Trade Commissioner, Canada House, Trafalgar Square, S.W. 1. Cable address—Agrilson.

Liverpool (Territory covers North of England, Lincolnshire, North Midlands, and North Wales.)

H. R. Poussette, Martins Bank Building, 31 North John Street.

Bristol (Territory covers West of England, South Wales, and South Midlands.)

E. L. McColl, Northcliffe House, Colston Ave.

Glasgow.....

G. B. Johnson, 200 St. Vincent Street. Cable address—Cantracom.

United States—

New York City. (Territory includes Bermuda.)

D. S. Cole, British Empire Building, Rockefeller Centre, New York City. Cable address—Cantracom.

Under an arrangement made by the Minister of Trade and Commerce with the British Foreign Office, Canadian manufacturers, exporters, and others interested in trade matters may secure information and advice from British commercial diplomatic officers and British consuls in all countries in which Canada is not represented by her own Commercial Intelligence Service.

Commercial Intelligence Journal.—The Commercial Intelligence Journal, containing the reports of the Trade Commissioners and other pertinent material relating to export trade, is published weekly by the Department of Trade and Commerce in both English and French editions. The subscription price for either edition is \$1 per annum in Canada and \$3.50 outside of the Dominion. Special reports dealing with various phases of Canada's export trade are also issued from time to time, as supplements to the Commercial Intelligence Journal.

Section 3.—Statistics of External Trade.*

For the correct interpretation of the statistics of external trade, it is necessary that the following definitions and explanations of the terms used should be carefully kept in mind, as well as certain inaccuracies, only briefly mentioned below, which necessitate corresponding adjustments to external trade statistics if the true position of trade in relation to the total of Canada's international transactions is to be shown. These adjustments are treated more fully in the publications of the Dominion Bureau of Statistics dealing with Canada's Balance of International Payments.

Fiscal Years.—The Canadian fiscal year ended on June 30 of the years from 1868 to 1906, and on Mar. 31 of 1907 and subsequent years.

Quantities and Values.—In all tables of imports and exports, the quantities and values are based upon the declarations of importers (import entries) and exporters (export entries), as subsequently checked by customs officials.

Imports: Valuation.—"Imports" means "Imports entered for consumption". "Entered for consumption" does not necessarily imply that the goods have been actually consumed in Canada, but that they have passed into the possession of the importer and that duty has been paid on that portion liable for duty.

Under the main provisions of the law, the value of merchandise imported into Canada is the fair market value or price thereof when sold for home consumption

* Revised by A. L. Neal, B.A., B.Sc. (Econ.), Chief, External Trade Branch, Dominion Bureau of Statistics. This Branch publishes the Annual Report on the Trade of Canada, the Condensed Preliminary Report on the Trade of Canada (annual), the Quarterly Report on the Trade of Canada, the Calendar Year Report on the Trade of Canada, the Summary of the Trade of Canada (monthly), etc. For complete list of the publications of this Branch, see Chapter XXIX, Section 1, under "External Trade".

in the principal markets of the country from which, and at the same time when, said merchandise was exported directly to Canada; but the value shall not be less than the price to jobbers and wholesalers generally, nor less than the actual cost of production at the time of shipment plus a reasonable advance for cost of selling and profit. (See Secs. 35 to 45 of the Customs Act.) Under these provisions and amendments thereto, some imports are given arbitrary valuations differing from those upon which actual payments for the imports are made.

For Customs entry purposes, the value of the currency of the country of export is converted to Canadian currency at exchange ratios as authorized by law and Orders in Council. (See Sec. 55 of the Customs Act and Orders in Council respecting currency valuations.) Inaccuracies arising from fluctuations in the exchange rates of foreign currencies are treated more fully below under the heading "Discrepancies in Trade Statistics between Canada and Other Countries".

Canadian Exports: Valuation.—"Canadian produce" exported includes Canadian products or manufactures, also exports of commodities of foreign origin which have been changed in form or enhanced in value by further manufacture in Canada, such as sugar refined in Canada from imported raw sugar, aluminium extracted from imported ore, and articles constructed or manufactured from imported materials. The value of exports of Canadian merchandise is the actual cost or the value at the time of exportation at the points in Canada whence consigned for export.

Foreign Exports: Valuation.—"Foreign produce" exported consists of foreign merchandise which had previously been imported (entered for home consumption). The value of such commodities is the actual cost.

Countries to which Trade is Credited.—Imports are classified as received from the countries whence they were consigned to Canada. The countries of consignment are the countries from which the goods have come, without interruption of transit, save in the course of transshipment or transfer from one conveyance to another. The countries whence goods are consigned are not necessarily the countries of actual origin, since goods produced in one country may be purchased by a firm in another country and thence dispatched, after a longer or shorter interval, to Canada. In such cases the second country would be the country of consignment, to which the goods would be credited. An example is the case of tea grown in the Orient but purchased in the bonded market in London, England; Canadian statistics record such imports as coming from the United Kingdom.

Exports are credited to the country of final destination, *i.e.*, the country to which they are consigned, whether that country possesses a seaboard or not. The country of final destination is the country to which goods exported from Canada are intended to pass, without interruption of transit save in the course of transshipment or transfer from one means of conveyance to another.

Discrepancies in Trade Statistics between Canada and Other Countries.—Canadian statistics of exports are rarely in exact agreement with the import figures of her customers and similar differences occur with Canadian imports. Many factors contribute to these discrepancies; among these are the following:—

(1) Differences in the basis of the Canadian valuations and those of the valuations of other countries.

The recent period of disturbed currency relations between countries has introduced an additional element of difference in valuations. Thus imports from the United Kingdom have been valued all along at \$4.86½ to the £, although for two years after Sept. 21, 1931, the actual value of the £ was below that figure, dropping

as low as \$3·70, and the actual value of imports from the United Kingdom was thereby greatly exaggerated. More recently, when the exchange value of the £ has been above par, imports from the United Kingdom have been undervalued. Similar inaccuracies have resulted from disturbances in exchange levels with other countries, and the placing of arbitrary valuations upon their currencies, as in the case of imports from Japan.

A further discrepancy in valuation of imports from the United Kingdom existed from 1920 to Mar. 31, 1935, in connection with distilled spirits, an important item in our imports from that country. The valuation of Canadian imports of spirits from the United Kingdom included, during this period, the excise duty in addition to the British export valuation, an excess valuation aggregating over \$200,000,000 for the period 1920-34. The excise duty has been excluded from the valuation of such imports since April 1, 1935.

(2) Even where the statistics cover the same period of time, there are quantities of goods on their way from the exporting to the importing country at the beginning and end of the period.

(3) By far the greatest discrepancies occur from the impossibility of determining the country of final destination for exports or the actual country of origin for imports. A considerable proportion of Canada's exports to overseas countries (16·5 p.c. in 1937) is shipped *via* the United States. Some of this is credited by importing countries to the United States. Canadian grain exports, for example, are frequently routed through the United States in bond. Most of this grain leaves Canada with the United Kingdom as the stated destination, but large quantities are later diverted to other European or overseas countries and some is taken out of bond for consumption in the United States. Thus the Canadian record of exports to the United Kingdom may be \$100,000,000 or more in excess of Canadian products actually received by the United Kingdom, while stated exports to other overseas countries are short this amount. Again, United States grain is routed through Canada and shipped from Montreal and is therefore frequently shown by other countries as imported from Canada, while it is included in United States statistics as an export to Canada. As mentioned above, purchases in bonded markets in England, Germany, Belgium, and France are included in Canadian imports from those countries but are not included by those countries in exports to Canada.

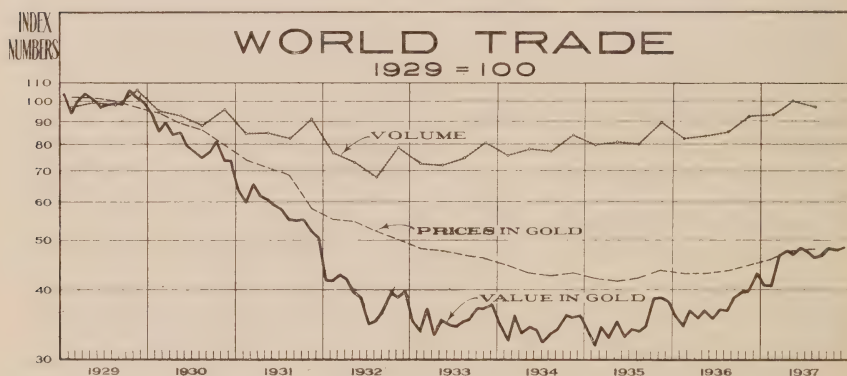
For more detailed discussion of this subject see the article and tables on "Discrepancies in Trade Statistics" on pp. 778-781 of the Annual Report on the Trade of Canada, 1928, and pp. 21 and 24 of the Condensed Preliminary Report on the Trade of Canada, 1937, both published by the Dominion Bureau of Statistics.

Exports of Gold in Trade Statistics.—Beginning in the tables of the 1937 Year Book, gold bullion exported from Canada as merchandise was included as a part of the total commodity exports and the statistics were revised accordingly back to 1926. Refined gold exported is considered merchandise when the export does not reduce domestic monetary reserves. When the Royal Mint in Ottawa began to refine gold, exports formerly shipped as gold-bearing quartz, dust, etc., began to be exported in the form of bullion and until 1935 were recorded under coin and bullion as distinct from merchandise. In order to maintain comparability with the statistics of previous years, and also since Canada is a large gold-producing country and exports of gold are as much a part of national production as any other item, it was considered expedient to make the change indicated above. The gold exports have been valued since June 1, 1931, at the monthly average current market price. Since February, 1936, the Bank of Canada has been holding gold under

earmark for clients abroad and exports of Canadian gold are diminished by the amounts so held. Such earmarked holdings on Mar. 31, 1936, were 262,039.79 fine oz. and on Mar. 31, 1937, 1,555,836.579 fine oz.

Subsection 1.—Value and Quantum of World Trade.*

World imports and exports, on which the figures in Statement IV, p. 508, are based, are taken as the sum of the recorded imports and exports of individual countries reduced to the common monetary unit of United States old gold dollars (*i.e.*, gold valued at \$20.67 per fine ounce). On this basis the value of world trade increased by nearly 8 p.c. in 1936. The average prices in gold for goods entering into world trade rose (for the first time since 1925) by between 2 and 3 p.c. and the quantum of trade rose by about 5 p.c. (roughly as much as in 1935 and as the average for the years 1925-29) and reached a level 14 or 15 p.c. below that of 1929. The quantum of trade declined annually from 1929 to 1932 when it had reached a level about 25 p.c. below that of 1929. Since 1932, quantum has increased each year from only slightly in 1933 to probably the largest increase in 1936. As indicated above, average gold prices of goods comprising world trade had been declining since 1925. The annual declines were comparatively small until the end of 1929, became quite precipitous to 1932, and then tapered off to 1935, in which year they were only 42.5 p.c. of their level in 1929 or about 41 p.c. of that of 1927. The trend of gold prices turned upward in 1936. Later monthly reports of the League of Nations indicate that the trend in both quantum and prices was even more strongly upward during the early part of 1937 but levelled off in the latter part of year.



Trade by Groups of Commodities.—The commodities that enter into world trade may be roughly divided into three groups, namely, foodstuffs, raw materials, and manufactured goods. The gold prices of foodstuffs and of raw materials rose about 5 p.c. for each group in 1936, largely due to increases during the second half of the year; the prices of manufactured goods, on the other hand, appear not to have shared in the increase in prices, partly because of the devaluation of the currencies of several industrial countries in the autumn. The improvement, developing since 1932 in the barter terms of trade of agricultural and mineral-producing countries, therefore continued, although the terms of trade of these

* Abbreviated from "Review of World Trade, 1936", published by the League of Nations.

countries had deteriorated so rapidly during the early years of the depression that they still remained lower than in the years 1925-29. The quantum of foodstuffs entering into trade appears to have remained stable, so that the increase in the quantum of world trade in 1936 resulted entirely from increases in industrial raw materials and in manufactured goods.

The estimated movement since 1929 of average gold prices and quantum of commodities belonging to the three groups is shown in Statement I below. The estimates are based on information concerning the four principal trading countries representing about 40 p.c. of world trade. The average prices of raw materials fell further and more rapidly than either of the other groups. Prices of foodstuffs declined more slowly, but the decline continued longer and carried the price level almost as low as that of raw materials. Prices of both of these groups rose in 1936. Prices of manufactured goods declined still more slowly and not so far as for the other groups, but the average prices of manufactured goods for the year 1936 were still at the lowest level. The quantum movements of these groups were almost the reverse of their price movements. The quantum of trade in manufactured goods declined more rapidly and to a lower point than that of either of the other groups and, although it has been rising relatively more rapidly since 1932, it was still low in 1936. The quantum of raw materials did not decline so far and in 1936 was approaching the 1929 level again. The quantum of foodstuffs did not drop so far as either of the other groups, but the decline continued until 1934 and the rise since then has been small.

I.—PRICE AND QUANTUM MOVEMENTS OF GROUPS OF COMMODITIES IN WORLD TRADE, 1929 AND 1932-36.

(1929=100.)

Item.	1929.	1932.	1933.	1934.	1935.	1936.
PRICE MOVEMENT (In U.S.A. old gold dollars).						
Foodstuffs.....	100.0	52.0	45.5	41.5	40.5	42.5
Materials, raw or partly manufactured...	100.0	44.0	40.0	39.5	39.5	41.5
Manufactured goods.....	100.0	64.0	56.0	50.0	48.0	48.0
All Commodities.....	100.0	52.5	46.5	43.5	42.5	43.5
QUANTUM MOVEMENT (1929=100).						
Foodstuffs.....	100.0	89.0	83.0	82.0	85.5	85.5
Materials, raw or partly manufactured...	100.0	81.5	87.5	88.0	91.5	95.5
Manufactured goods.....	100.0	59.0	60.5	66.5	69.5	75.5
All Commodities.....	100.0	74.5	75.5	78.0	82.0	85.5

Another significant analysis of world trade is derived from a rough division of commodities into capital goods and consumption goods. The former group includes wood and timber, ores, iron, steel, base metals, metal manufactures, machinery, instruments, and vehicles. The second group includes, besides ordinary articles of consumption and their raw materials, such goods as chemicals and coal. Capital goods represented 21.5 p.c. of the total gold value of world trade in 1929, 17.5 p.c. in 1932, and 22 p.c. in 1935, the remainder being consumption goods.

Gold prices of capital goods in 1935 were 46.5 p.c. of those in 1929, while prices of consumption goods in 1935 were only 40 p.c. of those in 1929. The quantum of capital goods in 1932 was 53 p.c. and in 1935, 74.5 p.c. of 1929, while the quanta of consumption goods were 79.5 p.c. and 85 p.c., respectively, of 1929. Thus

from 1932 to 1935 the rise in the quantum of capital goods amounted to about 40 p.c. as against only 7 p.c. for the latter. Yet, owing to the heavy contraction of trade in capital goods during the early depression years, the quantum of trade in such goods, calculated on a 1929 basis, still lagged behind that in other goods. Indications are that the trade in capital goods continued to increase more rapidly than that of other goods in 1936. The foregoing division between capital and other goods is, at best, a rough one. It is obvious that many goods of wood and metal, though semi-durable, are distinctly consumption goods. It is likely that the diverse tendencies indicated above would be even more pronounced if the division between the two categories could be made more accurately. The recent expansion in armaments throughout the world should be borne in mind in connection with trade in capital goods.

Geographic Distribution of World Trade.—In Statement II below, showing the percentage distribution of world trade by continents for the period 1929-36, the figures for each continental group are the sums of those of the individual countries comprising such group and therefore include trade between the members of the group. The United Kingdom and the United States have been separated from the remainder of their respective continental groups because trade tendencies in these two principal trading countries show movements differing from those of the remainder of their continental groups. Thus while the total trade of the United Kingdom has become an increased percentage of total world trade, that of the remainder of Europe has become considerably less. The trade of the United States has declined materially as a percentage of world trade, but that of the remainder of North America (chiefly Canada), after declining during the depression, was about the same percentage in 1936 as in 1929.

II.—PERCENTAGE DISTRIBUTION OF WORLD TRADE BY CONTINENTS, 1929, 1932, 1935, AND 1936.

(Basis: Recorded values in U.S.A. old gold dollars.)

Continental Group.	Imports.				Exports.				Total Trade.			
	1929.	1932.	1935.	1936.	1929.	1932.	1935.	1936.	1929.	1932.	1935.	1936.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Europe (incl. U.S.S.R.).	55.5	60.6	57.4	56.6	48.8	51.1	48.1	46.5	52.4	56.2	52.9	51.7
United Kingdom.....	15.2	16.3	16.7	17.7	10.8	9.9	10.7	10.3	13.1	13.2	13.8	14.1
Other Europe.....	40.3	44.3	40.7	38.9	38.0	41.2	37.4	36.2	39.3	43.0	39.1	37.6
North America.....	16.1	12.5	12.6	13.9	19.5	16.3	15.9	16.4	17.7	14.2	14.2	15.1
United States.....	12.2	9.5	9.9	10.9	15.6	12.2	11.5	11.4	13.8	10.8	10.6	11.2
Other North America	3.9	3.0	2.7	3.0	3.9	4.1	4.4	5.0	3.9	3.4	3.6	3.9
Latin America.....	7.7	5.4	6.6	6.6	9.6	9.1	9.9	10.0	8.6	7.2	8.2	8.3
Africa.....	4.8	5.8	6.4	6.3	4.5	6.7	7.2	7.2	4.6	6.2	6.8	6.7
Asia (excl. U.S.S.R.)....	13.2	13.7	14.4	13.7	14.9	13.7	15.6	16.3	14.0	13.7	14.9	15.0
Oceania.....	2.7	2.0	2.6	2.9	2.7	3.1	3.3	3.6	2.7	2.5	3.0	3.2
World.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The above analysis of trade by continental groups may be supplemented by analysing the trade of the principal political groups or empires, as in Statement III. As in the case of the preceding statement, the figures for each group are the sums of those of the individual countries comprising the group.

The share of the British Commonwealth (including colonies, protectorates, etc., as well as the Dominions) in world trade fell from 27.9 p.c. in 1929 to 26.7 p.c. in 1931, but has since increased to 29.8 p.c. in 1935 and 30.9 p.c. in 1936. The increase between 1935 and 1936 was due to the expansion in imports as well as exports, but, while the United Kingdom herself accounts for the bulk of the rise in the share of world imports, her share in world exports declined. The rise from 1932 to 1936 in

the share of the British Commonwealth in world trade contrasts sharply with the fall in that of the French and Netherlands Empires.

III.—PERCENTAGE DISTRIBUTION OF WORLD TRADE BY POLITICAL GROUPS, 1929, 1932, 1935, and 1936.

(Basis: Recorded values in U.S.A. old gold dollars.)

Group.	Imports.				Exports.				Total Trade.			
	1929.	1932.	1935.	1936.	1929.	1932.	1935.	1936.	1929.	1932.	1935.	1936.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
British Commonwealth	29.4	28.9	30.9	32.2	26.3	26.0	28.6	29.6	27.9	27.5	29.8	30.9
French Empire.....	8.5	11.6	9.5	9.4	7.6	8.6	7.9	6.8	8.0	10.2	8.7	8.1
Netherlands Empire....	4.8	5.3	4.5	4.3	4.6	4.9	4.6	4.7	4.7	5.1	4.6	4.5
Totals.....	42.7	45.8	44.9	45.9	38.5	39.5	41.1	41.1	40.6	42.8	43.1	43.5
Rest of the World—												
United States.....	12.2	9.5	9.9	10.9	15.6	12.2	11.5	11.4	13.8	10.8	10.6	11.2
Other countries.....	45.1	44.7	45.2	43.2	45.9	48.3	47.4	47.5	45.6	46.4	46.3	45.3
Totals.....	57.3	54.2	55.1	54.1	61.5	60.5	58.9	58.9	59.4	57.2	56.9	56.5
Grand Totals.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Rise of Discriminatory Measures in the Period 1928-32.—Changes in the geographical distribution of trade in the past decade have, to a great extent, been the result of commercial policy. Some ten years ago, there were relatively few exceptions to the rule that each country endeavoured to sell its products in the dearest market and buy the goods it required in the cheapest market; at present, price is in many countries no longer the only factor governing the direction of trade.

The change in commercial policy was due largely to the disturbances in the international accounts of numerous countries during the past decade and particularly to the heavy reduction in the supply of capital available to the principal debtor countries from the middle of 1928. The discontinuation of French capital exports on any considerable scale and the withdrawal of French short-term assets abroad, from the time when the franc was legally stabilized in June of that year, was an important and early factor in bringing about a change in the relationship between creditor and debtor countries. The decline in United States capital exports followed almost immediately upon that of the French, while British capital exports fell off in 1930.

The consequences of this change in capital movements can be only briefly outlined here. The redistribution of capital resources and the accompanying change in relative prices at first gave rise to a boom in certain creditor countries, while the chief debtor countries suffered from an inadequate supply of foreign means of payments; after the breakdown of the boom in 1929-30, the economic situation of these countries rapidly grew worse, their gold and currency resources were reduced as well as the prices of primary products, their terms of trade deteriorated, while their charges in the form of interest and amortization remained fixed. The terms of trade of the industrial creditor countries, as well as of Germany, improved, but the general price fall that occurred did not spare the economy of any country.

During the early part of the depression both debtor and creditor countries endeavoured to protect their economies against disturbances in their international accounts by new import barriers, but those raised by creditor countries were of particular importance as they directly impeded the adjustment of trade balances to the balances of capital transactions. A particularly disturbing example was the

reduction in the outlet for foreign goods in the United States after the adoption in 1930 of the Hawley-Smoot Tariff, by which nearly nine hundred duties were raised.

The connection between commercial policy and international capital movements became more pronounced during the financial crisis of 1931. The withdrawal of a portion of the large amounts of short-term capital invested in Central Europe, particularly in Germany, by various creditor countries, transferred by means of merchandise imports into the United Kingdom, where most goods could still be imported without hindrance and whence the transfer (for example, in the form of gold) did not meet with any difficulties, appeared to have been one of the principal causes of the depreciation of sterling, which was followed by the introduction in the United Kingdom of customs duties for various industrial products under the "Abnormal Importations Act" later in the year.

The contraction of British imports from industrial countries played an outstanding part in the events that followed, because it was by means of these imports that the transfer to the United Kingdom was effected of the bulk of the British income from abroad on account of the interest and dividends earned for services performed. With the smaller scope for such transfer, the financial position of various debtor countries deteriorated and several of them defaulted on their debts; in addition, a considerable scarcity of foreign currency occurred in various countries of Central Europe that had been accustomed to dispose of a large share of their exports in the United Kingdom or in other countries specializing in the British market, and had financed their purchases of primary products by their excess of exports in this trade.

The discriminatory treatment which before 1931 existed in international trade was limited by recognition of the fact that, in the long run, a country preventing its importers from buying in the cheapest market injured its own economy. Such considerations were to a large extent put aside after the financial crisis, when each country felt the economic strain to which it was exposed as a temporary disturbance originating abroad. The changes in prices were too rapid and too great to permit of a smooth adaptation of the domestic economy to the new competitive position, and the protection of that economy against breakdown appeared more important than the exchange of goods with foreign countries. The reinforcement of protective policies that followed had, in practice, always a discriminatory effect, as it chiefly affected trade with industrial or food-producing countries; but measures which were even in form discriminatory were also adopted on a scale that would have been unthinkable a few years earlier. Within a short time, a partially new technique for regulating merchandise trade as well as other international transactions developed. Its main instruments were, in creditor countries, quantitative restrictions of imports and, in debtor countries, exchange control; the latter, which was frequently combined with debt *moratoria*, gave rise to clearing for payments agreements and variable export subventions, and contributed to the tendency towards the balancing of bilateral transactions. All these measures are clearly discriminatory in substance, if not in form. In the case of clearing agreements, the discriminatory effect lies in the inducement they afford to the country whose balance in clearing is active to prevent the formation of frozen assets abroad by increasing imports from the partner, even if the additional imports have to be paid for at higher prices than those prevailing elsewhere.

It is not possible to indicate in detail how these measures have affected the distribution of trade, but attention may be drawn to the tendency for an increased proportion of trade to develop within certain more or less well-defined groups of

countries. The world empires are an example of such groupings and especially in the case of the British Commonwealth, trade between members of the group represents an increased proportion of the total trade of the group. Another grouping consists of debtor countries with weak currencies and, among such countries, mutual clearing agreements have resulted in the trade between them becoming a much greater proportion of their total trade. This change in distribution was determined, not by prices prevailing in the import and export markets concerned, but by discrimination rendered possible by commercial policy.

Recent Factors.—In spite of the restraints upon trade outlined above, the increase in prices of primary products since 1935 and the readiness with which such products were absorbed by free currency countries were of distinct benefit even to those raw-material-producing countries exercising exchange control and there were some signs of a return of trade into more normal channels.

If comparison is made between the import figures for 1935 and 1936, it is found that the greatest increases are recorded by industrial countries. The United Kingdom and the United States alone account for almost half of the total world increase in imports and other industrial countries for another fourth. The remaining countries, which mainly export foodstuffs and raw materials and represent one-half of world imports, thus account for only one-fourth of the increase in world imports. Of the increase in the value of world exports, however, industrial countries account for only about one-third and agricultural or mining countries for the remaining two-thirds. Germany was an exception to this general trend of industrial countries, for her exports increased more than her imports, but Germany, unlike the other principal industrial countries, is a debtor country.

The principal creditor countries—the United Kingdom, the United States, and France—increased their shares in world imports but their shares in world exports were reduced. The shares of debtor countries—Germany, and the majority of non-industrial countries—in world imports and exports moved in the opposite direction.

The circumstances determining trade movements differ from country to country. The progress of internal recovery from the depression in a number of countries, especially the United Kingdom and United States, with the consequent increase of imports of these countries, was a potent factor in the further recovery of world trade. Drought in the United States and labour disputes in that country and France tended to cut down the exports of those countries. The trade of several countries around the Mediterranean was adversely affected by unfavourable climatic conditions and political disturbances. The trade of countries of the former gold bloc—especially France, Netherlands, and Switzerland—was adversely affected by the depressed conditions within these countries before they readjusted their currencies in the autumn of 1936.

Canada's Position in World Trade.—The foregoing brief outline of the course of world trade in the period since 1929, taken from the League of Nations' reports, is presented as a background against which Canada's position in world trade may be viewed. According to these figures, Canada, in 1936, stood eighth in imports, fourth in exports, and fifth in total trade, whereas in 1929 she was fifth in each category. The position of fourth in exports in 1936 was largely due to the decline in exports of France, a decline which may be temporary. During the declining phase of the depression from 1929 to 1932, Canada's share in total world trade declined from 3.68 p.c. to 3.24 p.c. due to a great decline in the share of imports more than offsetting a slight increase in the share of exports. In the

recovery phase of the depression since 1932, Canada's share in total world trade has increased to 3.8 in 1936. The share of imports was still very low although it has recovered considerably since a low point of 2.3 p.c. in 1933. Canada's share of exports has been well maintained and, with increases since 1932, is now considerably larger than in 1929. The position is shown in the first section of Statement IV below.

The section of Statement IV showing the index of gold prices is significant as an indication of changes in the barter terms of trade for the countries shown. Generally speaking, terms of trade improved for industrial countries and deteriorated for raw-material countries from 1929 to 1932. Japan and the Union of South Africa were notable exceptions in each class. Since 1932 the movement of prices has been somewhat the reverse, although the maladjustments of 1932 were still not entirely compensated in 1936. Canada, as a country whose imports are chiefly manufactured goods and whose exports are chiefly primary materials, experienced a greater decline from 1927 to 1932 in the average price of exports which dropped to 45.1 p.c. of the 1927 level, than of imports which were 50.8 p.c. Since 1932, although the further decline in import prices has been a little larger than that of export prices, the import prices still averaged higher in 1936 at 41.4 p.c. compared to 39.6 p.c. for exports. In this comparison it should be borne in mind that Canadian exports in the statement include domestic gold, so that the remainder of Canadian exports are under still poorer barter terms than the figures indicate.

The quantum of Canadian imports has been recovering since 1932, but in 1936 it was still only 86.6 p.c. of that of 1927, was still more below that of 1929, and was below the estimated average for the world which stood at 92.4 p.c. of 1927. The quantum of Canadian exports has likewise been recovering since 1932 and made a remarkable gain in 1936 reaching a level above those of 1927 and 1929, and above the world average in 1936.

IV.—PERCENTAGE, PRICE, AND QUANTUM OF TRADE OF TWENTY-TWO LEADING COUNTRIES OF THE WORLD, CALENDAR YEARS 1929, 1932, 1935, AND 1936.

NOTE.—Basis: Recorded values of merchandise trade converted to U.S.A. old gold dollars. Price indexes are on the basis of U.S.A. old gold dollars. The year 1927 is taken as the base for both price and quantum indexes.

Item and Country.	Imports.				Exports.				Total Trade.	
	1929.	1932.	1935.	1936.	1929.	1932.	1935.	1936.	1929.	1936.
PERCENTAGES OF THE TOTAL.										
United Kingdom.....	15.2	16.3	16.7	17.7	10.8	9.9	10.7	10.3	13.1	14.1
United States.....	12.2	9.5	9.9	10.9	15.6	12.2	11.5	11.4	13.8	11.2
Germany.....	9.0	8.0	8.1	7.7	9.7	10.6	8.8	9.1	9.4	8.4
France.....	6.4	8.4	6.7	6.9	6.0	6.0	5.3	4.4	6.2	5.7
Canada ^{1, 2}	3.7	2.7	2.7	2.9	3.7	3.8	4.3	4.8	3.7	3.8
Japan.....	2.8	2.8	3.4	3.5	2.9	2.8	3.6	3.6	2.9	3.6
Belgium.....	2.8	3.2	3.0	3.2	2.7	3.2	3.0	3.2	2.7	3.2
India.....	2.6	2.5	2.4	2.1	3.6	2.8	3.0	3.2	3.0	2.6
Netherlands.....	3.1	3.8	3.1	2.9	2.4	2.6	2.3	2.2	2.8	2.6
Union of South Africa ³	1.2	1.2	1.8	2.0	1.4	2.5	2.5	2.6	1.3	2.3
Australia.....	2.0	1.3	1.8	2.0	1.8	2.1	2.3	2.4	1.9	2.2
Argentina.....	2.3	1.5	1.7	1.5	2.8	2.6	2.4	2.4	2.5	1.9
China (incl. Manchuria).....	2.3	2.7	2.5	2.1	2.0	1.6	1.6	1.6	2.1	1.9
Italy.....	3.2	3.0	3.1	1.9	2.4	2.7	2.2	1.8	2.8	1.9
Sweden.....	1.3	1.5	1.8	1.9	1.5	1.4	1.7	1.8	1.4	1.9
British Malaya.....	1.4	1.1	1.3	1.3	1.6	1.0	1.7	1.7	1.5	1.5
Switzerland ⁴	1.4	2.4	2.0	1.7	1.2	1.1	1.3	1.2	1.3	1.5
Czechoslovakia.....	1.7	1.6	1.4	1.4	1.8	1.7	1.6	1.5	1.7	1.5
Denmark.....	1.3	1.5	1.4	1.4	1.3	1.6	1.4	1.4	1.3	1.4
Netherlands Indies.....	1.3	1.1	0.9	0.8	1.8	1.7	1.6	1.8	1.5	1.3
Brazil.....	1.2	0.8	1.1	1.1	1.4	1.4	1.4	1.5	1.3	1.3
U.S.S.R. (Russia).....	1.3	2.6	1.0	1.2	1.4	2.3	1.6	1.3	1.4	1.2
Totals for World ⁴	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

For footnotes, see end of table, p. 509.

IV.—PERCENTAGE, PRICE, AND QUANTUM OF TRADE OF TWENTY-TWO LEADING COUNTRIES OF THE WORLD, CALENDAR YEARS 1929, 1932, 1935, AND 1936—concluded.

Item and Country.	Imports.				Exports.				Total Trade.	
	1929.	1932.	1935.	1936.	1929.	1932.	1935.	1936.	1929.	1936.
INDEX OF GOLD PRICES, (1927=100).										
United Kingdom.....	98.9	46.6	38.9	41.3	97.0	52.8	44.0	45.6		
United States.....	91.6	45.3	31.1	33.6	101.2	59.3	44.6	45.3		
Germany.....	101.3	50.2	47.3	49.8	98.7	70.7	58.2	58.9		
France.....	94.0	55.2	46.2	47.0	95.8	64.9	55.9	53.4		
Canada ^{1, 2}	95.3	50.8	40.2	41.4	94.6	45.1	37.3	39.6		
Japan ³	95.1	39.7	35.3	36.2	93.3	33.0	25.1	24.9		
Belgium.....										
India.....	93.2	46.8	37.5		90.2	39.5	34.4			
Netherlands.....										
Union of South Africa ⁴	94.4	58.1	41.4	41.0	97.9	68.2	61.8			
Australia.....	89.1				96.3	31.8	25.8			
Argentina.....	83.0	50.4	36.8	34.6	103.6	41.2	33.2			
China ⁵	90.7	53.1	41.9		105.8	44.4	36.1			
Italy.....	92.0	48.0	41.6	43.6	86.8	47.8	36.9	34.5		
Sweden.....	98.9	55.8	43.5		96.6	51.4	40.0			
British Malaya.....	93.9	49.6	36.2		94.8	29.0	38.3	43.3		
Switzerland ⁶	96.6	63.5	51.9		102.0	75.7	64.4			
Czechoslovakia.....	94.8	59.3	53.6	52.7	97.7	70.0				
Denmark.....	101.0	57.3	46.4	50.2	109.9	46.9	46.1			
Netherlands Indies.....	96.9	59.2	44.9	43.7	73.2	29.4	25.0	25.0		
Brazil.....										
U.S.S.R. (Russia).....	101.1				89.6	40.2	29.4	30.5		
Averages for World ⁴	96.1	50.9	40.8	41.8	96.5	50.2	41.0	42.0	96.3	41.9
INDEX OF QUANTUM, (1927=100).										
United Kingdom.....	101.4	88.9	95.4	102.0	104.0	68.1	78.6	79.7		
United States.....	114.8	69.8	93.0	101.7	107.1	55.9	62.4	66.2		
Germany.....	93.3	65.4	61.9	59.5	126.5	75.2	67.9	74.9		
France.....	122.0	108.3	90.8	98.0	110.7	58.9	54.2	51.2		
Canada ^{1, 2}	118.2	62.7	74.8	86.6	96.4	74.9	88.6	115.9		
Japan ³	104.9	100.9	116.9	128.3	116.2	125.0	185.4	202.4		
Belgium.....										
India.....	103.4	81.4	86.6		108.0	74.9	88.4			
Netherlands.....										
Union of South Africa ⁴	120.5	75.7			101.9	104.9	105.5			
Australia.....	97.7				107.4	139.5	143.0			
Argentina.....	119.6	51.8	67.8	70.6	90.2	82.7	85.2			
China ⁵	127.8	93.0	68.2		97.0	57.1	53.3			
Italy.....	116.6	83.2	86.2	54.8	114.3	90.6	86.1	80.0		
Sweden.....	113.7	89.9	120.0		116.1	78.1	112.4			
British Malaya.....					91.8	75.4	85.0	84.1		
Switzerland ⁶	110.4	107.5	91.7		101.5	50.6	55.2			
Czechoslovakia.....					104.2	62.1				
Denmark.....					101.9	112.5	88.5			
Netherlands Indies.....	126.8	71.9	68.3	67.8	120.1	112.3	108.8	140.1		
Brazil.....										
U.S.S.R. (Russia).....	116.0				125.6	183.5	160.0	130.4		
Averages for World ⁴	109.3	80.9	88.5	92.4	108.3	81.8	89.4	94.3	108.8	93.0

¹ Includes exports of gold produced within the country.² Imports are adjusted for over- or under-valuation (see p. 500).³ Including improvement and repair trade beginning 1933.⁴ Totals include other countries not specified.⁵ Indexes were not published in the Review of World Trade.⁶ Estimated from preliminary Canadian sources.⁷ Indexes based on year 1928.⁸ Excluding Manchuria since July 1, 1932.

Subsection 2.—Historical Statistics of Canadian Trade.

The most important features of Canadian trade are reviewed historically since Confederation, in most cases, in the first nine main tables of this chapter (pp. 528-535).

A general view of the trade of Canada in the fiscal years from 1868 to 1937 is furnished in Table 1 (p. 528), giving the imports of merchandise for home consumption, dutiable and free, and the exports of Canadian and foreign produce, the total trade as here given being the aggregate of the two. Necessarily, some

difficulties have been met in maintaining comparable statistics through such a length of time, one of the most serious of these arising from the different methods adopted in dealing with exports of foreign produce. For example, the shrinkage in the exports of foreign produce since 1920 has been due to change of statistical method rather than to actual diminution in value or volume of such goods exported. For the past 17 years, re-exports of foreign products from bonded warehouses have not been included in Canadian trade statistics either as imports or as exports, while the exports of foreign produce during this period have been composed of goods which had previously been entered as imports for home consumption. Such goods are debited to Canada when entering this country, and should be credited to Canada when re-exported.

From Table 2 it will be observed that, in most of the years from Confederation to the outbreak of the Great War, imports entered for consumption exceeded total exports, especially during the great growing period from 1904 to 1914. Since that time, however, there has been an annual excess of exports except in the fiscal years ended 1921, 1930, and 1931, when there were heavy return movements of funds to Canada in the form of an excess of imports.

The values of coin and bullion imported and exported are shown in Table 3 (p. 530). Exports of non-monetary gold bullion are not included in this table (see p. 501).

The figures of Tables 5 and 6 (pp. 532-533) show the overwhelming predominance of the two English-speaking countries in Canada's foreign trade; in the year ended Mar. 31, 1937, for example, 79.4 p.c. of the Dominion's exports of domestic produce was shipped to these two countries, which, in the same year, together provided 77.9 p.c. of our imports for home consumption. Tables 7 and 8 show, respectively, by years, the percentage proportions of imports from the United Kingdom and the United States to totals of dutiable and free imports since 1911, and the *ad valorem* rates of duty collected on imports from these and from all countries from 1868 to 1937. The higher rates collected on imports from the United Kingdom than on those from the United States in spite of the preferential tariff accorded British goods since 1897 is largely due to the following factors: (1) imports of alcoholic beverages, which are subject to high duties, bulk largely in imports from the United Kingdom but are negligible from the United States; (2) imports of raw materials for processing in Canada, which are free of duty, form an important part of imports from the United States; and (3) dutiable imports from the United Kingdom are largely highly manufactured goods which are subject to relatively higher rates than semi-manufactured goods for further manufacture in Canada, which form another large element of imports from the United States. This subject is treated in more detail at pp. 58-59 of the Condensed Preliminary Report on the Trade of Canada, 1936, and at pp. 509-510 of the 1937 Year Book.

Subsection 3.—General Analysis of Current Import and Export Trade.

The figures of Statement V, p. 511, indicate the seriousness of the decline in trade during the depression shown by the figures for the fiscal year 1933, and the extent of the recovery since then. That the decline in the quantum or volume of trade was not so great as that of the values here shown is evident from the analyses in Subsections 1 and 10 of this chapter. The recovery from the low point of the depression has been greater in exports than in imports.

Imports are an indication of purchasing power in Canada and are especially influenced by the expansion or contraction of capital expenditures within Canada.

The increase, therefore, of 16·9 p.c. in the volume and 19·5 p.c. in the value of imports reflects a recovery in purchasing power in Canada and probably some slight expansion in capital expenditures which were almost completely suspended during the worst years of the depression. It may be noted in Statement V that imports of iron and non-ferrous metal products, the groups chiefly influenced by capital expenditures, were much higher in 1937 than in 1933, though still much below those of the fiscal year 1927, chosen because it approximates to the calendar year 1926 taken as a representative year of the post-war prosperity period. Similarly in 1936 and 1937 imports have increased from the United States which is the chief external source for machinery and other durable goods and materials.

Exports represent the sale in world markets of surplus products of Canadian farms, mines, forests, fisheries, and factories and, when there is a ready sale for such products at prices profitable to the producer, large exports result in prosperity in Canada. In the year 1937 exports increased in volume by 16·8 p.c., while higher prices accounted for an increase of about 8·2 p.c. in the value of exports, so that Canadian goods were sold abroad not only in larger volume but also at more profitable prices. (See Subsection 10, pp. 582-585, for a comparison of volume and value.) The figures of exports shown in Statement V indicate that a shift is taking place in the importance of groups in the composition of our exports. In the prosperity period, 1925-29, Canadian exports were predominantly agricultural. Indeed, in that period it was largely because bountiful harvests coincided with an active world demand at good prices that prosperity was widespread in Canada. In 1927 the two groups, vegetable and animal products, made up 59 p.c. of our exports, while non-ferrous metals constituted only 6·4 p.c. In 1937, on the other hand, vegetable and animal products made up only 45 p.c. of exports, but non-ferrous metals (including gold) increased to 22 p.c. This is very suggestive of the part which the mining and exporting of non-ferrous metals (including gold) are playing in the current economic recovery of Canada.

V.—SUMMARY OF THE TRADE OF CANADA BY MAIN GROUPS, FISCAL YEARS ENDED MAR. 31, 1914, 1927, 1933, 1936, AND 1937.

Group.	Values of Imports (Million \$).					Values of Domestic Exports (Million \$).				
	1914.	1927.	1933.	1936.	1937.	1914.	1927.	1933.	1936.	1937.
ALL COUNTRIES.										
Agricultural and Vegetable Products.....	97·6	213·1	88·3	110·3	131·4	201·2	575·0	203·4	242·9	346·5
Animals and Products	41·1	53·2	15·4	24·3	27·9	76·6	167·3	54·3	100·9	133·9
Fibres and Textiles...	109·2	183·6	61·2	89·8	104·8	1·9	7·7	4·7	10·3	12·8
Wood and Paper.....	37·4	48·0	20·5	23·3	28·9	63·2	284·1	120·9	181·8	223·9
Iron and Its Products	143·8	229·4	58·9	114·3	150·2	15·5	74·3	17·3	52·4	53·2
Non-Ferrous Metals..	35·6	52·7	18·1	33·7	37·0	53·3	82·6	96·9	212·5	230·2
Non-Metallic Minerals.....	85·3	156·8	87·7	105·4	117·0	9·3	28·9	9·2	19·1	26·1
Chemicals and Allied Products.....	17·1	31·8	25·5	29·9	33·1	4·9	16·2	11·1	16·0	19·2
Miscellaneous Commodities.....	52·1	62·2	30·8	31·7	41·6	5·7	18·1	10·3	13·1	15·4
Totals.....	619·2	1,030·9	406·4	562·7	671·8	431·6	1,254·2	528·1	849·0	1061·2

V.—SUMMARY OF THE TRADE OF CANADA BY MAIN GROUPS, FISCAL YEARS ENDED
MAR. 31, 1914, 1927, 1933, 1936, AND 1937—concluded.

Group.	Values of Imports (Million \$).					Values of Domestic Exports (Million \$).				
	1914.	1927.	1933.	1936.	1937.	1914.	1927.	1933.	1936.	1937.
UNITED KINGDOM.										
Agricultural and Vegetable Products....	16.2	38.3	17.4	18.0	17.9	146.8	330.1	114.2	154.3	197.1
Animals and Products	5.7	5.4	2.4	3.8	5.1	35.4	67.8	29.9	54.6	73.4
Fibres and Textiles...	60.6	72.8	25.6	40.6	46.6	0.2	0.9	1.3	2.3	2.5
Wood and Paper.....	3.7	3.9	3.4	3.5	3.8	12.8	15.8	11.3	23.8	36.1
Iron and Its Products	17.3	15.0	12.0	20.6	23.0	1.4	8.1	5.6	11.2	13.0
Non-Ferrous Metals.	4.8	5.6	3.3	5.8	6.1	16.6	14.2	14.6	61.8	75.8
Non-Metallic Minerals.....	6.3	9.3	12.6	12.9	13.1	0.4	2.3	1.3	2.2	2.7
Chemicals and Allied Products.....	4.3	4.9	4.6	6.4	6.9	0.6	3.6	2.9	3.2	4.2
Miscellaneous Commodities.....	13.2	8.8	5.2	6.3	7.0	1.0	4.1	3.3	3.2	3.2
Totals.....	132.1	163.9	86.5	117.9	129.5	215.2	446.9	184.4	321.6	408.0
UNITED STATES.										
Agricultural and Vegetable Products....	44.1	97.1	30.2	30.9	38.3	34.1	60.0	3.9	44.7	73.6
Animals and Products	23.3	35.4	8.6	11.0	12.6	32.3	75.3	13.9	34.1	46.4
Fibres and Textiles...	32.5	66.9	22.5	32.1	37.2	1.2	3.5	0.9	2.6	3.0
Wood and Paper.....	31.7	41.1	15.1	17.9	23.1	45.2	242.0	93.9	125.2	153.7
Iron and Its Products	121.4	206.7	43.9	88.4	121.7	2.0	10.7	2.0	5.4	6.1
Non-Ferrous Metals.	27.7	42.2	12.9	23.3	25.4	34.2	41.0	68.1	121.8	117.3
Non-Metallic Minerals.....	74.2	132.0	62.9	78.1	86.8	7.2	17.6	4.9	11.6	17.1
Chemicals and Allied Products.....	9.6	20.6	15.5	17.5	19.4	3.2	7.7	4.7	7.4	8.7
Miscellaneous Commodities.....	31.8	45.0	20.9	20.3	29.2	4.0	10.6	5.1	7.5	9.1
Totals.....	396.3	687.0	232.5	319.5	393.7	163.4	468.4	197.4	360.3	435.0

Statistical Tables of Current Trade.—Tables 10 to 18 (pp. 536-577) deal with the current trade statistics of the Dominion. Tables 10 and 11 are summary tables, showing by groups our trade with the United Kingdom, the United States, and all countries, by values and percentages, for the latest four fiscal years. Table 12 shows the same in detail for exports and Table 13 for imports of all important commodities. Table 14 shows by main classes imports as dutiable or free and exports as of Canadian or foreign produce for the five fiscal years 1933-37. Table 15 shows imports and exports for the fiscal year ended 1937 by degree of manufacture and by origin, and Table 16 gives similar information on a classification according to purpose. Table 17 gives our imports and exports for the two latest years by ports and provinces, and Table 18 shows the values imported from different countries dutiable or free under the general, preferential, and treaty rate tariffs in 1937.

Subsection 4.—Trade with the United Kingdom and the British Empire.

Ever since Confederation the external trade of Canada has been carried on predominantly with one or other of the two great English-speaking countries, the United Kingdom and the United States. In the early years of the Dominion, the United Kingdom, which was then lending Canada capital on a considerable scale for those times, supplied more than half her imports, though as a customer she came second to the United States. Later on, however, partly as the result of the free trade policy of the United Kingdom and the protectionist policy of the United States, the United Kingdom became the chief market for Canada's exports, holding

that position steadily from 1890 to 1920, while in certain of the more recent years the United States again has been Canada's largest customer.

As regards imports, on the other hand, the United States, though in the beginning ranking second in supplying Canada's wants, took first place as early as 1876 and has maintained that position steadily since about 1883, the proximity of the two countries and the increasing population on both sides of the line being largely responsible. During the Great War, when the resources of the United Kingdom were absorbed in the struggle, the percentage of Canada's imports coming from the United States rose as high as 82.3 p.c. in 1918. From 1921 to 1930 it remained fairly constant at about two-thirds, while in recent years it has declined and was 58.6 p.c. in 1937. Imports from the United Kingdom, which fell as low as 8.0 p.c. of the total in 1919, fluctuated between 15.2 p.c. and 19.0 p.c. between 1921 and 1930, but have been somewhat higher since then and stood at 19.3 p.c. in 1937. (See Tables 5 and 6 of this chapter.)

Statement V, p. 512, shows Canada's trade with the United Kingdom in three recent years compared with that in 1927 and 1914. It may be noted that in the latest years there has been a very great decline in imports of textiles, partially compensated by some increase in imports of iron, non-metallic mineral, and chemical products. Vegetable and animal products continue to make up the major part of exports to the United Kingdom, but there has been an actual and a great proportional increase in exports of wood and paper products and non-ferrous metals.

The commodities making up Canada's export and import trade with the United Kingdom in recent years are dealt with in summary form in Tables 10 and 11, and in detail in Tables 12 and 13 of this chapter.

Trade of Canada with the British Empire.—Canada was the first of the British Dominions to grant a preference on goods the produce and manufacture of the United Kingdom and reciprocating British Dominions and possessions. This preference was extended from time to time to other portions of the British Empire until now it is applicable to practically every British Dominion and possession. In the case of Newfoundland, in addition to the preference, Canada grants free admission to fish and fish products. The British West Indies receives special concessions under the Agreement of 1925 referred to on p. 490.

Average Rates of Duty under the British Preference.—Table 18 on p. 577 shows for the latest fiscal year the imports from countries of the British Empire entering Canada either at lower rates of duty or free under the preferential tariff. An analysis of the extent of the preference on British goods was given on p. 509 of the 1937 Year Book. To make a fair comparison between the United Kingdom and the United States of the average rates of duty collected on ordinary dutiable imports, imports of alcoholic beverages and manufactured tobaccos should be eliminated, while imports free of duty under the British preference but dutiable when imported from the United States should be added to the dutiable imports from the United Kingdom. After these logical adjustments the average rate of duty on imports from the United Kingdom has been lower in every year since 1922 while the difference in favour of the United Kingdom has become 50 p.c. or more in recent years.

The British preferential tariff enacted in 1897 has had the effect of stimulating Canada's Empire trade. When the British preference became effective in 1897, Canada's total imports from the United Kingdom amounted to only \$29,401,000, compared with imports in 1887 valued at \$44,741,000 and in 1873 at \$67,997,000, so that from 1873 to 1897 imports from the United Kingdom declined by \$38,596,000 or 56.7 p.c. After the introduction of the British preferential tariff, the downward

trend in the value of imports from the United Kingdom was reversed, although the proportion of our total imports coming from the United Kingdom continued to decline. Imports from other Empire countries which were insignificant before the beginning of the century have increased both in actual value and proportion of total imports. However, during the latest four years and especially since the Ottawa Agreements, the proportion of trade with both the United Kingdom and the total British Empire has shown an upward trend, although both the volume and direction of Canada's exports vary widely with the vicissitudes of crops here and in other parts of the world. Canada's exports to Empire countries other than the United Kingdom consist very largely of manufactured products, while imports from those Empire countries are chiefly raw materials.

In the interpretation of statistics covering a long period, such as those in Statement VI following, the wide fluctuations in price levels should be borne in mind. Thus the fiscal year 1896, just prior to the introduction of the British preference, marked about the close of a long period of declining prices which began in the '70's. Prices followed a rising trend from then to the last pre-war fiscal year 1914, and rose very steeply throughout the War to a peak in the fiscal year ended 1921. In the following year, prices suffered a sudden drop and then remained fairly steady until 1929, after which came the serious decline which accompanied the depression. (See Chapter XX.) The trade of Canada with the British Empire in certain fiscal years since 1886 was as follows:—

VI.—CANADA'S TRADE WITH THE BRITISH EMPIRE.

Item and Fiscal Year.	Canadian Trade with—			Percentage of Total Trade with—		
	United Kingdom.	Other British Empire.	Total British Empire.	United Kingdom.	Other British Empire.	Total British Empire.
	\$	\$	\$	p.c.	p.c.	p.c.
IMPORTS.						
1886.....	39,033,006	2,383,560	41,416,566	40.7	2.5	43.2
1896.....	32,824,505	2,388,647	35,213,152	31.2	2.2	33.4
1906.....	69,183,915	14,605,519	83,789,434	24.4	5.1	29.5
1914.....	132,070,406	22,456,440	154,526,846	21.4	3.6	25.0
1921.....	213,973,562	52,029,126	266,002,688	17.3	4.2	21.5
1922.....	117,135,343	31,973,910	149,109,253	15.7	4.3	20.0
1926.....	163,731,210	45,088,918	208,820,128	17.6	4.9	22.5
1929.....	194,041,381	63,346,829	257,388,210	15.3	5.0	20.3
1930.....	189,179,738	63,494,864	252,674,602	15.2	5.1	20.3
1931.....	149,497,392	55,401,034	204,898,426	16.5	6.1	22.6
1932.....	106,371,779	41,440,214	147,811,993	18.4	7.2	25.6
1933.....	86,466,055	33,918,269	120,384,324	21.3	8.3	29.6
1934.....	105,100,764	35,303,122	140,403,886	24.2	8.2	32.4
1935.....	111,682,490	44,503,981	156,186,471	21.4	8.5	29.9
1936.....	117,874,822	59,846,488	177,721,310	20.9 ¹	10.7 ¹	31.6
1937.....	129,507,885	68,657,957	198,165,842	19.3	10.2	29.5
EXPORTS (Canadian).						
1886.....	36,694,263	3,262,803	39,957,066	47.2	4.2	51.4
1896.....	62,717,941	4,048,198	66,766,139	57.2	3.7	60.9
1906.....	127,456,465	10,964,757	138,421,222	54.2	4.5	58.7
1914.....	215,253,969	23,388,548	238,642,517	49.9	5.4	55.3
1921.....	312,844,871	90,607,348	403,452,219	26.3	7.6	33.9
1922.....	209,361,675	46,473,735	345,835,410	40.4	6.3	46.7
1926.....	508,237,560	90,350,435	598,587,995	38.5	6.8	45.3
1929.....	429,730,485	106,258,803	535,989,288	31.4	7.8	39.2
1930.....	281,745,965	97,825,173	379,571,138	25.2	8.7	33.9
1931.....	219,246,499	73,617,897	292,864,396	27.4	9.2	36.6
1932.....	174,043,725	46,016,686	220,060,411	29.0	7.7	36.7
1933.....	184,361,019	37,757,908	222,118,927	34.9	7.2	42.1
1934.....	288,582,666	50,423,723	339,006,389	43.3	7.6	50.9
1935.....	290,855,237	67,314,241	358,169,478	38.4	8.9	47.3
1936.....	321,556,798	77,754,681	399,311,479	37.9	9.1	47.0
1937.....	407,996,698	87,601,407	495,598,105	38.4	8.3	46.7

¹ Revised since the publication of the 1937 Year Book.

Subsection 5.—Trade with the United States and Other Foreign Countries.

Trade with the United States.—In the period immediately following Confederation, the United States was Canada's chief customer, trade still following its accustomed channels in spite of the denunciation of the Reciprocity Treaty, which had expired on Mar. 17, 1866. On the other hand, Canada bought more from the United Kingdom than from the United States. (See Tables 5 and 6 for a record of trade with the United States since 1868.)

In the '70's, however, the proportion of Canadian exports to the United States, which had been over 50 p.c. in the first few years of Confederation, declined materially, but for the most part remained at over 40 p.c. until after the enactment of the McKinley Tariff of 1890, when it fell to 35 p.c. in 1892 and as low as 27 p.c. in 1898. In the first decade of the twentieth century it averaged about 35 p.c., but fell off considerably in the war years. Since the War, the average has been about 40 p.c., although in 1934 under the influence of the depression and high tariffs in the United States the proportion dropped to 33 p.c. (See Statement VII, p. 516).

Imports from the United States exceeded half of total Canadian imports for the first time in the years from 1877 to 1879, while in the 1880's they were approximately equivalent to those from the United Kingdom, at from 40 to 45 p.c. from either country. By 1896, however, imports from the United States again reached half of the total, and subsequently have never fallen below that point, increasing both absolutely and relatively during the great period of expansion until 1913, when they were 65.0 p.c. of all imports. In the extraordinary circumstances of the Great War they rose as high as 82.3 p.c. in 1918, and throughout the 1920's stood at about two-thirds of the total. They declined to less than three-fifths of the total since 1932 as shown in Statement VII, p. 516. The reduced demand for capital goods was an important factor in the depression years.

The commodities of Canadian export and import trade with the United States are shown in summary form in Tables 10 and 11 and in detail in Tables 12 and 13 of this chapter.

Trade with the United States by main groups of commodities for three recent fiscal years compared with 1927 and 1914 is shown in Statement V, p. 512. Non-metallic minerals (chiefly coal and petroleum products) and chemicals are an increasingly important factor in imports from the United States, although iron products became again in 1935 the most important group and there are still large imports of textiles which include raw cotton, and of vegetable products largely comprised of tropical or out-of-season fruits and vegetables. Aside from the effects of the Ottawa Agreements with their purpose of increasing intra-Empire trade and of the at-times heavy discount against Canadian funds in the United States, a factor in the fluctuation of the United States' share in imports into Canada which should not be overlooked is the influence of capital expenditures here. The United States is the principal external source for machinery, equipment, and structural materials. The almost complete cessation of capital expenditures in the depression therefore affected imports from the United States more than from any other country.

Another important factor influencing imports from the United States is Canadian purchasing power which is very directly affected by exports to the United States. These were seriously curtailed by the very high rates on many important Canadian products introduced by the Hawley-Smoot Tariff of June, 1930, and thereafter imports from the United States showed a greater decline than Canadian exports to that country. (See the 1936 Year Book, p. 508.)

However, this situation was relieved by the Trade Agreement with the United States which became effective on Jan. 1, 1936. The influence of the economic recovery in both Canada and the United States should not be overlooked as a factor in the recent increases of trade. The Trade Agreement has undoubtedly been of great benefit to producers of live stock and lumber in Canada and, in a less degree, to many other classes.

Canadian Trade via the United States.—Imports from overseas countries *via* the United States have steadily declined in recent years, especially those from the British Empire. This decrease has followed: (1) general propaganda to utilize Canadian sea and river ports; (2) additional concessions to goods imported under the preferential tariff if they come direct. Provision has been made, in trade treaties and agreements negotiated with foreign countries, that goods must be imported *via* a Canadian sea or river port in order to obtain the full benefits of special rates of duty. Between 1920 and 1937 imports *via* the United States have decreased from 9.5 p.c. to 2.8 p.c. of the total imports from overseas countries.

The proportion of exports from Canada to overseas countries going *via* the United States shows a considerable decline since 1927, the percentages by fiscal years being: 1927, 39.4; 1928, 38.7; 1929, 36.6; 1930, 33.7; 1931, 27.3; 1932, 18.7; 1933, 14.2; 1934, 14.4; 1935, 17.3; 1936, 18.4; 1937, 16.5. An important factor in the decline for recent years has been the requirement of direct shipment for goods to qualify under the Empire preferences introduced in Britain. Details by countries are given in Table 21 of this chapter.

Trade with Other Foreign Countries.—The relative changes in the positions occupied by the United States and other foreign countries in Canada's trade in various years from 1886 to 1937 are shown in Statement VII below. During the War and the years immediately following, when production and exports by many European countries were curtailed, imports from the United States rose to a high proportion and were 69 p.c. in 1921, while those from other foreign countries declined. With this exception the proportion of imports from other foreign countries has remained surprisingly constant over the period of nearly half a century at about one-tenth to one-eighth of total imports. Canadian exports to the United States have fluctuated between 30 p.c. and 46 p.c. of the total, while those to other foreign countries increased from 4.5 p.c. to as high as 24.0 p.c. in 1929; they declined to 12.3 p.c. in 1937.

VII.—CANADA'S TRADE WITH THE UNITED STATES AND OTHER FOREIGN COUNTRIES.

Item and Fiscal Year.	Canadian Trade with—			Percentages of Total Trade with—		
	United States.	Other Foreign Countries.	All Foreign Countries.	United States.	Other Foreign Countries.	All Foreign Countries.
IMPORTS.	\$	\$	\$	p.c.	p.c.	p.c.
1886.....	42,818,651	11,756,920	54,575,571	44.6	12.2	56.8
1896.....	53,529,390	16,618,619	70,148,009	50.8	15.8	66.6
1906.....	169,256,452	30,694,394	199,950,846	59.6	10.9	70.5
1914.....	396,302,138	68,365,014	464,667,152	64.0	11.0	75.0
1921.....	856,176,820	117,979,374	974,156,194	69.0	9.5	78.5
1922.....	515,958,196	82,736,883	598,695,079	69.0	11.0	80.0
1926.....	608,618,542	109,890,062	718,508,604	65.6	11.9	77.5
1929.....	868,012,229	140,278,652	1,008,290,881	68.6	11.1	79.7
1930.....	847,442,037	148,156,943	995,598,980	67.9	11.8	79.7
1931.....	584,407,018	117,307,251	701,714,269	64.5	12.9	77.4
1932.....	351,686,775	79,005,136	430,691,911	60.8	13.6	74.4
1933.....	232,548,055	53,451,365	285,999,420	57.2	13.2	70.4
1934.....	238,187,681	55,207,058	293,394,739	54.9	12.7	67.6
1935.....	303,639,972	62,604,710	366,244,682	58.1	12.0	70.1
1936.....	319,479,594	65,518,159	384,997,753	56.8	11.6	68.4
1937.....	393,720,662	79,989,062	473,709,724	58.6	11.9	70.5

VII.—CANADA'S TRADE WITH THE UNITED STATES AND OTHER FOREIGN COUNTRIES—concluded.

Item and Fiscal Year.	Canadian Trade with—			Percentages of Total Trade with—		
	United States.	Other Foreign Countries.	All Foreign Countries.	United States.	Other Foreign Countries.	All Foreign Countries.
	\$	\$	\$	p.c.	p.c.	p.c.
EXPORTS (Canadian).						
1886.....	34,284,490	3,515,148	37,799,638	44.1	4.5	48.6
1896.....	37,789,481	5,152,185	42,941,666	24.4	4.7	39.1
1906.....	83,546,306	13,516,428	97,062,734	35.5	5.8	41.3
1914.....	163,372,825	29,573,097	192,945,922	37.9	6.8	44.7
1921.....	542,322,967	243,388,515	785,711,482	45.6	20.5	66.1
1922.....	292,588,643	101,816,627	394,405,270	39.5	13.8	53.3
1926.....	480,199,723	241,800,429	722,000,152	26.4	18.3	54.7
1929.....	504,161,604	328,108,239	832,269,843	36.8	24.0	60.8
1930.....	515,049,763	225,637,401	740,687,164	46.0	20.1	66.1
1931.....	349,660,563	157,217,708	506,878,271	43.7	19.7	63.4
1932.....	257,770,160	122,201,241	379,971,401	42.9	20.4	63.3
1933.....	197,424,723	108,520,628	305,945,351	37.4	20.5	57.9
1934.....	220,072,810	106,874,872	326,947,682	33.0	16.1	49.1
1935.....	304,721,354	93,705,093	398,426,447	40.3	12.4	52.7
1936.....	360,302,426	89,416,512	449,718,938	42.4 ¹	10.6 ¹	53.0
1937.....	435,014,544	130,569,257	565,583,801	41.0	12.3	53.3

¹Revised since the publication of the 1937 Year Book.

With further reference to the trade of Canada with countries other than the United Kingdom and the United States, attention is directed to Tables 14 to 45 (pp. 91-131) of the Condensed Preliminary Report on the Trade of Canada, 1937, published by the Dominion Bureau of Statistics. These tables show the trade of Canada in leading commodities with 96 British and foreign countries for the fiscal years 1936 and 1937.

Subsection 6.—Geographical Distribution of Canadian Trade by Continents and Countries.

Canadian Trade by Continents, 1937.—A summary of the imports and exports of Canada by continents is given in Statement VIII, p. 518. The part of the table showing percentages is of particular interest as indicating trends in the distribution of trade. Africa was the only division from which imports during the latest year declined in actual value, largely due to a decline in purchases of corn from British South Africa. A great increase in imports of corn from Argentina and increased imports of crude oil from other South American countries chiefly accounted for the increased share of imports from that continent. The progress of recovery in Canada tended to increase imports of durable and capital goods and industrial materials to a greater extent than imports of finished consumption goods and foods. Thus there was a rise in the share of imports from the United States (iron and other metal goods and industrial materials), Asia (rubber and tin from the East Indies), and Oceania (wool, hides, and sugar from Australia, New Zealand, and Fiji), while imports of manufactured consumption goods from Europe and foods from "Other North America" remained relatively stable and therefore the share in imports from those divisions declined. An increased demand with higher prices for grains, timber, and non-ferrous metals, raised the share of exports going to Europe in the latest year. Over the longer term since 1932, however, the restrictive measures regarding trade adopted by many European countries has reduced the share of "Other Europe" in both the imports and exports of Canada.

VIII.—CANADA'S TRADE BY CONTINENTS, FISCAL YEARS 1932-37.

Item and Continent.	Values in Millions of Dollars.						Percentages of Totals.					
	1932.	1933.	1934.	1935.	1936.	1937.	1932.	1933.	1934.	1935.	1936.	1937.
IMPORTS.												
Europe—												
United Kingdom....	106.4	86.4	105.1	111.7	117.9	129.5	18.4	21.3	24.2	21.4	20.9	19.3
Other.....	50.9	34.9	34.0	37.0	38.2	41.4	8.7	8.6	7.9	7.1	6.8	6.2
North America—												
United States.....	351.7	232.5	238.2	303.6	319.5	393.7	60.8	57.2	54.9	58.1	56.8	58.6
Other.....	17.6	13.9	13.0	17.1	16.4	17.9	3.0	3.4	3.0	3.3	2.9	2.6
South America.....	17.3	10.6	11.7	15.2	19.5	28.8	3.0	2.6	2.7	2.9	3.5	4.3
Asia.....	18.5	12.4	16.2	20.6	28.4	35.4	3.3	3.1	3.7	3.9	5.0	5.3
Oceania.....	9.5	9.1	9.7	10.8	12.8	17.5	1.7	2.2	2.3	2.1	2.3	2.6
Africa.....	6.6	6.4	5.9	6.4	10.0	7.7	1.1	1.6	1.3	1.2	1.8	1.1
Totals, Imports...	578.5	406.2	433.8	522.4	562.7	671.9	100.0	100.0	100.0	100.0	100.0	100.0
EXPORTS (Canadian).												
Europe—												
United Kingdom....	174.0	184.4	288.6	290.8	321.6	408.0	29.0	34.9	43.3	38.4	37.9	38.4
Other.....	77.2	72.7	72.3	57.0	51.1	80.3	12.9	13.8	10.9	7.5	6.1	7.6
North America—												
United States.....	257.8	197.4	220.1	304.7	360.3	435.0	43.0	37.4	33.0	40.3	42.4	41.0
Other.....	32.7	25.9	23.2	20.8	21.5	25.4	5.4	4.9	3.6	2.8	2.5	2.4
South America.....	8.9	6.6	7.9	11.0	12.9	13.9	1.5	1.2	1.2	1.4	1.5	1.3
Asia.....	28.3	22.7	26.3	30.4	28.1	36.0	4.7	4.3	3.9	4.0	3.3	3.4
Oceania.....	10.2	12.4	17.5	26.3	35.2	40.1	1.7	2.4	2.6	3.5	4.1	3.8
Africa.....	10.9	6.0	10.0	15.6	18.3	22.5	1.8	1.1	1.5	2.1	2.2	2.1
Totals, Exports...	600.0	528.1	665.9	756.6	849.0	1,061.2	100.0	100.0	100.0	100.0	100.0	100.0

Imports from Principal Countries.—Statement IX which follows shows how predominant are the two great English-speaking countries as the source of supply of Canadian imports. Trade with these two leading countries is more fully covered in Subsections 4 and 5 of this chapter. During the fiscal year 1937, there were short crops of corn in the United States and British South Africa, with the result that imports of corn from Argentina were unusually heavy. Consequently, the position of third for Argentina may be only temporary, while British South Africa declined from ninth to twenty-ninth place. The percentage of imports from countries from which Canada obtains important industrial materials is tending to rise with the progress of recovery in Canada. Imports during the latest year from France were seriously affected by labour disputes and a high internal price level in that country before the franc was devalued. In Table 19 of this chapter may be found the values of imports from all important countries in recent years.

IX.—PERCENTAGES OF TOTAL IMPORTS INTO CANADA FROM EACH OF TWELVE LEADING COUNTRIES, FISCAL YEARS ENDED MAR. 31, 1934-37.

NOTE.—Countries arranged in order of importance, 1937.

Rank in—				Country.	Percentages of Total Imports.				P.C. Inc. (+) or Dec. (–) 1937 Compared with—		
1934	1935	1936	1937		1934.	1935.	1936.	1937.	1934.	1935.	1936.
1	1	1	1	United States.....	54.9	58.1	56.8	58.6	+ 65.6	+ 29.9	+ 23.5
2	2	2	2	United Kingdom.....	24.2	21.4	20.9	19.3	+ 23.2	+ 16.0	+ 9.9
19	16	15	3	Argentina.....	0.5	0.5	0.7	1.7	+471.9	+320.1	+ 213.1
3	3	3	4	Germany.....	2.3	1.9	1.8	1.7	+ 17.7	+ 16.7	+ 17.9
29	15	6	5	British Straits Settlements.....	0.2	0.6	1.3	1.6	+952.0	+254.9	+ 46.4
6	6	5	6	Australia.....	1.2	1.2	1.3	1.4	+ 76.6	+ 49.7	+ 30.1
5	5	4	7	British India.....	1.4	1.2	1.3	1.2	+ 40.1	+ 29.8	+ 11.6
12	12	8	8	Belgium.....	0.7	0.7	0.9	1.0	+109.3	+ 85.3	+ 31.5
4	4	7	9	France.....	1.6	1.2	1.2	1.0	– 6.4	0.1	– 3.9
17	18	17	10	New Zealand.....	0.6	0.5	0.6	0.8	+105.3	+112.1	+ 38.4
15	11	11	11	Jamaica.....	0.6	0.8	0.8	0.8	+ 95.9	+ 20.2	+ 20.0
24	19	10	12	British Guiana.....	0.3	0.5	0.8	0.8	+263.6	+106.2	+ 6.2
Percentages of Total Imports coming from above 12 Countries.....					88.5	88.6	88.4	89.9	–	–	–

Exports to Principal Countries.—Percentages in Statement X, as in the import statement, are indicative of the predominance of the United Kingdom and the United States as customers of Canada. Similarity of tastes and standards of living, as well as favourable tariff arrangements, are considerable factors in expanding exports of Canadian industrial products to the other British dominions. The industrial countries of Europe, especially those with liberal trade policies, are an important market for Canadian foodstuffs and non-ferrous metals. In the Orient, Japan has become largely industrialized and offers a growing market for Canadian foodstuffs, forest products (especially pulp and paper), non-ferrous metals, and other minerals. Table 20 of this chapter gives actual values of Canadian exports to all important British and foreign countries for the latest five fiscal years.

X.—PERCENTAGES OF TOTAL DOMESTIC EXPORTS FROM CANADA TO EACH OF TWELVE LEADING COUNTRIES, FISCAL YEARS ENDED MAR. 31, 1934-37.

NOTE.—Countries arranged in order of importance, 1937.

Rank in—				Country.	Percentages of Domestic Exports.				P.C. Inc. (+) or Dec. (–) 1937 Compared with—		
1934	1935	1936	1937		1934.	1935.	1936.	1937.	1934.	1935.	1936.
2	1	1	1	United States.....	33.0	40.3	42.4	41.0	+ 97.7	+ 42.8	+ 20.7
1	2	2	2	United Kingdom.....	43.3	38.4	37.9	38.4	+ 41.4	+ 40.3	+ 26.9
6	3	3	3	Australia.....	1.8	2.4	2.8	2.5	+122.0	+ 49.1	+ 12.4
5	6	6	4	Belgium.....	1.9	1.5	1.3	2.2	+ 86.9	+ 98.9	+111.9
4	4	4	5	Japan.....	2.1	2.2	1.7	2.0	+ 56.7	+ 27.7	+ 45.7
9	5	5	6	British South Africa.....	1.1	1.7	1.7	1.5	+113.8	+ 28.4	+ 15.3
7	8	9	7	France.....	1.8	1.3	0.9	1.1	– 1.6	+ 19.1	+ 53.2
12	9	7	8	New Zealand.....	0.7	1.0	1.2	1.1	+149.7	+ 52.3	+ 9.5
3	7	8	9	Netherlands.....	2.9	1.3	1.1	1.0	– 44.5	+ 8.4	+ 15.6
8	12	12	10	Germany.....	1.6	0.6	0.5	0.7	– 26.1	+ 75.0	+ 71.7
10	10	10	11	Newfoundland.....	0.9	0.8	0.8	0.7	+ 26.0	+ 19.5	+ 12.0
14	11	11	12	Norway.....	0.6	0.6	0.5	0.7	+ 76.6	+ 44.2	+ 50.9
Percentages of Total Domestic Exports going to above 12 Countries.....					91.7	92.1	92.8	92.9	–	–	–

Subsection 7.—Principal Commodities Imported and Exported.

The commodities which make up Canada's external trade are shown in detail for the four latest fiscal years in Tables 12, dealing with exports, and 13, with imports, beginning on p. 538 and p. 550, respectively.

Canada's Principal Imports.—Statement XI, which follows, shows the long-term trend of principal commodities imported into Canada in the fiscal years 1890, 1900, 1910, 1920, 1930, and 1937. In the interpretation of the trends in imports, shown in this statement, the effects of price changes and of fluctuations of the so-called business cycle should be kept in mind. Thus the Bureau of Statistics' index number of wholesale prices on the 1926 base was 59.3 in the calendar year 1889, 52.1 in 1899, 59.5 in 1909, 134.0 in 1919, 95.6 in 1929, and 74.6 in 1936, these calendar years approximating to the fiscal years ended 1890, 1900, 1910, 1920, 1930, and 1937. In the matter of business fluctuations, the fiscal year 1910 was influenced by the general development boom in Western Canada, 1920 was affected by the feverish activity which immediately followed the War, 1930 represented the end of the security inflation period and the beginning of the downturn, while in 1937 the effects of the depression and price decline were still being felt, although there was a distinct improvement as compared with the low figures of 1933.

During the period of 47 years covered by the statement, great changes have occurred in the character of the leading imports, due to developments both in the industrial organization of the country and the goods consumed by the people. Thus in 1890, many present-day leading imports, such as crude petroleum, automobiles and parts, artificial silk, electrical apparatus, aluminium, were either non-existent or formed very insignificant items of trade. Imports of farm implements in 1890 were valued at only \$161,000 but, due to the tremendous agricultural expansion in Canada since that time, as well as to increasing mechanization of agricultural operations, imports of farm implements have grown to a large item in spite of the wide development of their manufacture within the country. On the other hand, a number of the leading imports of 1890, such as woollen goods and raw wool, sugar and products, silk goods, tea, grain products, and meats, have become relatively much less important as imports. Then again, there were certain leading imports in 1890, such as coal, rolling-mill products, machinery, and fruits, which still remain among the chief items of imports owing to the absence of coal and high-grade iron ore deposits in the central portion of Canada, where population and industry are chiefly concentrated, and to the demand for fruits which cannot be grown in Canada. Owing to the industrial development of Canada since the beginning of the century, many of the leading imports are now raw materials required by Canadian industries. The quantities of a number of these raw materials imported in each year since 1911 are shown in Table 9, p. 535.

Among the factors affecting short-term fluctuations of imports, in distinction from the long-term trends outlined above, probably the greatest is the so-called business cycle. In periods of prosperous business activity capital expenditures are high as are also expenditures upon luxuries. It is, therefore, an indication of returning prosperity in Canada to find imports of machinery, rolling-mill products, electrical apparatus, farm implements, automobiles, unmanufactured wood, etc., recovering something of the relative importance among imports which they held for a few years up to 1930.

XI.—CANADA'S LEADING IMPORTS, FISCAL YEARS 1890, 1900, 1910, 1920, 1930, AND 1937.

NOTE.—Commodities arranged in order of importance in 1937.

No.	Commodity.	1890.	1900.	1910.	1920.	1930.	1937.
		\$	\$	\$	\$	\$	\$
1	Crude petroleum.....	¹	23,244	1,189,071	20,306,693	50,951,202	39,704,808
2	Coal.....	8,013,156	11,012,223	27,516,678	60,072,629	56,812,418	34,854,726
3	Rolling-mill products.....	5,645,704	11,905,937	15,692,051	39,985,746	61,943,553	31,351,446
4	Machinery, except farm.....	1,877,551	5,159,952	14,690,873	36,716,791	69,702,213	31,086,819
5	Automobile parts.....	¹	¹	269,586	12,674,823	35,746,929	27,379,705
6	Fruits.....	2,400,851	3,133,407	8,316,462	33,463,270	34,277,882	24,796,265
7	Sugar and products.....	6,452,654	6,610,845	14,962,770	73,613,354	27,987,156	20,440,887
8	Raw cotton.....	3,539,249	4,229,198	9,384,801	33,854,457	21,682,463	19,905,775
9	Woolen goods (incl. carpets).....	10,900,600	9,427,575	20,767,010	45,545,127	32,632,927	16,784,767
10	Cotton goods.....	3,792,584	6,399,705	17,928,093	49,088,060	27,275,170	14,636,551
11	Grain and grain products.....	3,034,049	8,298,884	7,806,665	9,080,073	25,082,671	14,209,382
12	Rubber and products.....	1,512,427	2,942,044	6,151,157	18,059,435	20,025,316	13,284,292
13	Vegetable oils.....	612,671	826,882	1,872,265	15,973,417	12,244,151	12,686,869
14	Books and printed matter.....	1,404,583	1,568,432	4,127,179	11,228,018	18,130,779	12,330,352
15	Electrical apparatus.....	317,315	810,900	3,688,538	15,550,254	37,611,263	11,991,038
16	Farm implements.....	161,277	2,148,867	2,661,207	14,578,106	30,075,453	10,803,750
17	Automobiles.....	¹	¹	1,732,215	15,035,545	34,464,666	10,410,102
18	Flax, hemp and jute.....	1,416,217	3,551,037	5,340,312	15,923,836	14,995,198	9,526,053
19	Tea.....	3,073,643	3,604,027	5,347,854	8,336,163	10,694,379	9,348,409
20	Engines and boilers.....	188,759	778,364	2,019,558	12,997,757	15,146,436	8,663,262
21	Petroleum, refined.....	690,283	830,025	2,326,681	10,566,692	25,180,476	8,265,796
22	Furs.....	1,058,001	2,106,441	5,768,075	12,877,520	11,923,949	8,208,740
23	Alcoholic beverages.....	1,695,161	1,938,112	4,459,566	9,135,536	45,026,487	8,094,533
24	Clay and products.....	948,876	1,593,255	4,118,844	6,371,567	12,256,769	7,744,156
25	Glass and glassware.....	1,268,314	1,658,694	2,932,104	6,926,459	10,453,706	7,583,443
26	Naïls, tops and waste wool.....	12,100	151,510	599,446	5,830,957	3,833,801	7,408,963
27	Paper.....	1,208,683	1,378,749	4,567,810	9,949,574	14,764,904	7,060,499
28	Wool, raw.....	1,729,058	1,574,834	1,587,175	2,672,211	4,306,945	6,476,705
29	Dyeing and tanning materials.....	484,217	711,508	1,412,099	5,623,720	3,548,656	5,975,440
30	Vegetables.....	337,859	625,749	1,751,265	5,722,600	11,040,765	5,900,976
31	Stone and products.....	862,037	1,029,711	1,773,953	3,687,702	8,702,988	5,701,551
32	Wood, unmanufactured.....	1,444,727	3,775,240	8,324,585	14,112,391	15,348,150	5,408,587
33	Hides and skins, raw.....	1,703,093	4,214,012	8,235,819	22,654,661	8,402,075	5,253,091
34	Leather.....	1,173,777	1,879,333	4,202,934	17,102,702	11,537,331	5,045,429
35	Aluminium.....	¹	12,543	794,490	2,747,385	6,058,864	4,751,819
36	Silk goods.....	2,654,505	3,880,535	3,590,829	31,341,944	19,606,559	4,533,717
37	Paints and varnishes.....	672,885	1,012,535	1,376,023	3,321,880	5,957,078	4,497,644
38	Raw silk.....	593,529	277,708	393,011	3,090,845	8,360,968	4,295,726
39	Wood, manufactured.....	1,355,230	824,195	3,085,079	7,893,284	12,711,307	4,128,282
40	Nuts, edible.....	231,449	400,441	1,237,292	5,859,573	5,095,109	3,748,241
41	Cocoa and chocolate.....	118,569	286,363	1,130,335	7,626,745	3,651,425	3,701,013
42	Coffee, green.....	591,158	491,148	1,194,061	4,711,079	5,924,635	3,636,467
43	Scientific and educational equipment.....	205,183	371,348	1,137,140	3,282,803	4,956,519	3,443,750
44	Drugs and medicines.....	513,331	481,359	962,083	3,402,932	3,808,721	3,274,066
45	Artificial silk.....	¹	¹	¹	¹	13,418,910	3,186,546
46	Manila, sisal, istle, etc., fibre.....	¹	¹	1,548,457	5,195,812	3,822,613	3,099,872
47	Woolen yarns.....	117,729	402,328	1,671,765	4,445,270	5,870,353	2,899,099
48	Sulphur.....	44,276	215,433	430,632	1,296,458	3,823,245	2,874,357
49	Brass and products.....	554,545	851,606	2,228,215	4,531,015	7,000,455	2,855,381
50	Cotton yarns.....	17,879	321,348	767,760	4,078,510	3,827,867	2,679,451
51	Fertilizers.....	14,444	88,974	5,395,423	1,796,752	5,033,592	2,643,245
52	Settlers' effects.....	1,810,217	3,065,410	10,273,428	10,181,034	11,181,203	2,641,324
53	Iron ore.....	¹	282,191	3,345,550	4,601,716	5,020,921	2,638,731
54	Seeds.....	478,397	1,916,994	1,167,321	4,210,782	5,061,255	2,441,743
55	Soda and compounds.....	329,084	624,873	785,524	2,982,371	4,410,621	2,437,412
56	Hardware and cutlery.....	1,250,369	1,434,209	1,967,647	4,210,142	4,950,119	2,437,225
57	Tin in blocks.....	266,463	580,855	1,005,467	2,662,728	2,488,074	2,408,521
58	Coke.....	155,513	506,839	1,695,603	2,476,450	6,403,354	2,591,338
59	Containers (outside coverings).....	456,478	609,171	2,143,076	2,233,208	6,285,755	2,278,666
60	Tools.....	427,305	825,541	891,820	2,050,286	3,192,449	2,156,538
61	Fish.....	899,683	1,060,708	1,630,744	3,491,678	3,474,921	2,081,411
62	Castings and forgings, iron.....	268,463	538,549	1,029,525	6,519,188	4,497,406	2,065,465
63	Clocks and watches.....	773,538	698,378	1,459,617	3,126,267	3,495,659	2,037,278
64	Gums and resins.....	159,508	287,276	2,256,307	4,987,716	3,431,591	2,023,197
65	Binder twine.....	4,915	866,892	1,772,585	4,904,524	1,845,305	2,019,374
66	Tubes and pipe, iron.....	484,008	1,122,987	2,358,848	4,160,378	5,948,162	1,928,253
67	Wire, iron.....	387,490	1,844,788	3,530,226	5,843,623	3,658,798	1,744,961
68	Toys and dolls.....	172,782	196,087	498,304	1,534,728	2,691,408	1,530,419
69	Stamped and coated products.....	42,042	268,545	492,884	1,016,777	2,349,230	1,478,720
70	Meats.....	1,632,143	1,371,184	2,427,901	22,100,333	7,599,473	1,147,849
71	Celluloid in lumps.....	18,311	27,136	120,002	743,856	2,042,941	1,144,700
72	Tobacco, raw.....	1,344,985	1,508,359	3,229,239	13,604,757	6,471,626	1,051,510
73	Diamonds, unset.....	110,480	451,792	1,902,710	4,470,846	3,193,871	1,046,076

¹ None recorded.

XI.—CANADA'S LEADING IMPORTS, FISCAL YEARS 1890, 1900, 1910, 1920, 1930,
AND 1937—concluded.

No.	Commodity.	1890.	1900.	1910.	1920.	1930.	1937.
		\$	\$	\$	\$	£	\$
74	Spices.....	213,677	242,597	428,075	1,130,902	1,478,575	936,718
75	Hats and caps.....	1,258,409	1,637,422	3,420,609	4,216,333	2,908,340	921,239
76	Copper and products.....	484,189	1,271,270	3,488,260	8,568,035	14,898,632	906,088
77	Plants and trees.....	136,326	28,510	178,470	709,507	1,913,447	837,588
78	Animals, living.....	837,385	841,168	1,711,723	2,570,377	2,802,754	812,702
79	Musical instruments.....	434,814	390,407	1,207,592	4,329,093	3,130,873	806,985
80	Nickel-plated ware.....	13,578	18,843	573,591	1,630,047	3,022,935	717,071
81	Pigs and ingots, iron.....	1,704,563	1,293,940	3,229,055	1,754,627	2,716,924	662,695
82	Soap.....	148,618	446,135	813,619	1,534,082	1,316,418	561,482
83	Salt.....	309,840	325,433	465,253	1,336,176	897,925	453,655
84	Butter.....	62,212	290,220	92,934	176,994	14,471,688	407,324

Canada's Principal Exports.—Statement XII, which follows, gives Canada's leading domestic exports for the fiscal years ended 1890, 1900, 1910, 1920, 1930, and 1937, arranged in descending order of importance in 1937. In the interpretation of these figures of the main commodities exported, the same qualifications should apply regarding price changes and business fluctuations as cited above in the case of imports. Furthermore, since agriculture still constitutes the leading source of Canadian exports, variations in crop conditions here and in other parts of the world cause important fluctuations in the year to year volume and value of exports.

Over the period of 47 years covered by the statement, the changes in Canada's exports have been very great, both in volume and in the relative importance of commodities. The great agricultural expansion of the Canadian West had scarcely begun in 1890. The leading exports then were sawmill and timber products, cheese, fish, cattle, barley, coal, and furs—indicating the large dependence of Canadian production at that time upon the eastern forests, mixed-farming areas, and fisheries. The four leading exports in 1937 were very unimportant in 1890. The year 1910 is the earliest year in the statement in which wheat appears as the leading export, although this first occurred in 1906. The rise of the great pulp and paper industry to a leading position has been still more recent, and similarly with regard to the production of non-ferrous metals, automobiles, and rubber tires. The export of non-monetary gold bullion has been of sufficient importance for separate classification only since 1926. On the other hand, exports of the products of mixed-farming operations, such as cattle, hides, cheese and butter, while showing wide fluctuations, have not expanded proportionately, and in some cases were very little or no greater in 1936 than in 1890. Much of the new agricultural area developed since 1890 has been better adapted to grain growing than to mixed-farming operations, so that, owing to the growth of population, the production of the older mixed-farming districts is to a larger extent consumed within the country. The rapid progress during the past two decades of the mining and metallurgical industries producing non-ferrous metals in Canada is illustrated in this statement by the increased importance since 1910 of exports of non-monetary gold, copper, nickel, silver, zinc, lead, aluminium, and platinum. The part played by these industries in supporting Canada's export trade has increased since 1930 with the curtailment of world trade in agricultural products. Indeed, in 1937, these great mining and metallurgical industries provided exports almost equal to those of agriculture and greater than those derived from the forest resources of Canada. In this connection mention should be made of the influence of low-cost hydro-electric power. The

direct effect of Canada's resources of water power may be traced in the statement not only in the growth of exports of pulp and paper and of electric energy but also in those of the non-ferrous metals, since the economy of the mining operations is dependent in large measure upon cheap electric power and the same factor is very important in the metallurgical processes. Similarly, the exports of artificial abrasives and of certain chemicals such as fertilizers, sodium compounds, and acids are largely due to cheap hydro-electric power.

XII.—CANADA'S LEADING DOMESTIC EXPORTS, FISCAL YEARS 1890, 1900, 1910, 1920, 1930, AND 1937.

NOTE.—Commodities arranged in order of importance, 1937.

No.	Commodity.	1890.	1900.	1910.	1920.	1930.	1937.
		\$	\$	\$	\$	\$	\$
1	Wheat.....	388,861	11,995,488	52,609,351	185,044,806	215,753,475	223,461,009
2	Newsprint paper.....	1	1	2,612,243	53,640,122	145,610,519	110,176,448
3	Gold bullion, non-monetary...	1	1	1	4,549,459 ²	76,667,269	45,882,184
4	Nickel.....	1	1,040,498	3,320,054	9,039,221	25,034,975	45,882,184
5	Planks and boards.....	17,637,308	22,015,990	33,100,387	75,216,193	49,446,887	40,284,864
6	Meats.....	895,767	13,615,621	8,013,680	96,161,234	15,030,671	36,114,497
7	Copper in forms.....	1	1	541,338	48,181	34,873,145	33,210,237
8	Wood-pulp.....	168,180	1,816,016	5,204,597	41,383,482	44,704,958	25,087,602
9	Fish.....	8,099,674	10,564,688	15,179,015	40,687,172	34,767,739	21,777,246
10	Whisky.....	25,383	396,671	1,010,657	1,504,132	25,856,136	21,587,038
11	Wheat flour.....	521,383	2,791,885	14,859,854	94,262,922	45,457,195	19,425,730
12	Automobiles.....	1	1	405,011	14,883,607	35,607,645	18,444,030
13	Furs, raw.....	1,874,327	2,264,580	3,749,005	20,628,109	18,706,311	14,901,211
14	Barley.....	4,600,409	1,010,425	1,107,732	20,206,972	10,388,735	14,000,092
15	Cattle.....	6,949,417	8,704,523	10,792,156	46,064,631	13,119,462	13,779,201
16	Lead.....	2,000	688,891	529,422	1,193,144	10,637,587	12,522,047
17	Aluminium in bars, etc.....	1	1	1,202,723	5,680,871	13,828,010	11,236,543
18	Cheese.....	9,372,212	19,856,324	21,607,692	36,336,863	18,278,004	10,569,302
19	Asbestos, raw.....	444,159	490,909	1,886,613	8,767,856	12,074,065	9,863,937
20	Zinc.....	1	1	1	950,802	8,366,712	8,679,198
21	Pulpwood.....	80,005	902,772	6,076,638	8,454,803	13,860,209	8,185,250
22	Platinum and other metals of the platinum group in concentrates or other forms.....	1	1	61,717	39,058	357,748	7,778,559
23	Fruits, chiefly apples.....	1,073,890	3,305,662	5,492,197	8,347,549	9,593,484	7,712,980
24	Rubber tires.....	1	1	1	7,395,172	18,153,225	7,607,472
25	Machinery, except farm.....	143,815	446,391	924,510	6,416,591	7,154,706	7,243,750
26	Silver ore and bullion.....	201,615	1,354,053	15,009,937	14,255,601	11,569,855	6,758,972
27	Shingles, wood.....	340,872	1,131,506	2,331,443	10,848,602	6,704,494	6,497,281
28	Gold, raw.....	657,022	14,148,543	6,016,126	5,974,334	34,375,003	6,395,282
29	Leather, unmanufactured.....	727,087	1,535,440	1,296,480	11,742,268	6,496,951	6,276,608
30	Farm implements.....	367,198	1,692,155	4,319,385	11,614,400	13,896,688	6,088,875
31	Fertilizers.....	4,291	51,410	371,315	6,694,037	7,990,313	5,809,174
32	Vegetables.....	597,074	503,993	1,534,228	11,656,483	11,240,747	5,569,676
33	Abrasives, artificial, crude.....	1	1	1	1,355,084	3,775,924	5,020,834
34	Bran and shorts.....	86,225	145,206	1,842,620	2,983,843	2,582,482	4,583,365
35	Rubber footwear.....	1	1	129,618	1,750,967	9,986,392	4,344,968
36	Seeds.....	182,200	322,652	4,602,797	9,915,391	3,237,774	4,221,697
37	Sodium compounds.....	1	1	1	4,208,518	4,160,890	4,074,851
38	Cereal foods.....	1	1	1,689,648	1,087,901	2,431,137	3,988,888
39	Pigs, ingots and blooms, iron.....	1	137,651	228,183	6,595,688	4,727,137	3,963,752
40	Paper board.....	1	1	1	4,568,066	2,506,496	3,764,831
41	Logs, wood.....	682,572	760,416	999,681	1,819,083	3,677,917	3,611,393
42	Hides and skins, raw.....	506,402	1,396,907	5,508,185	19,762,646	7,730,914	4,332,860
43	Copper ore and blister.....	133,251	1,387,388	6,023,925	11,871,039	37,735,413	3,176,469
44	Electric energy.....	1	1	1	4,028,154	4,075,619	3,137,466
45	Electrical apparatus.....	1	1	27,743	1,486,079	4,790,619	3,083,738
46	Films.....	1	1	7,740	9,349,455	4,055,855	3,078,334
47	Oats.....	256,156	2,143,179	1,566,612	7,631,498	6,304,199	2,902,938
48	Settlers' effects.....	818,001	1,095,536	2,274,005	4,233,772	2,440,968	2,818,534
49	Oatmeal and rolled oats.....	254,857	474,991	1,123,861	901,397	5,096,529	2,771,729
50	Acids.....	5,545	67	1	3,097,466	2,298,742	2,622,959
51	Automobile parts.....	1	1	1	130,264	1,504,264	2,462,391
52	Tobacco, raw.....	234	3,661	76,564	1	826,425	2,307,462
53	Socks and stockings.....	1	1	1	1	1	2,281,235
54	Rye.....	220,761	279,286	84,658	3,475,834	1,451,640	
55	Doors, sashes, etc. (wood)....	69,474	299,354	29,169	81,654	37,098	
56	Wool, raw.....	235,669	418,119	538,077	5,472,236	1,576,342	
57	Malt.....	150,380	10,939	11,328	1,320,773	64,736	

¹ None recorded.

² Fiscal year 1929. There were no exports in 1930.

XII.—CANADA'S LEADING DOMESTIC EXPORTS, FISCAL YEARS 1890, 1900, 1910, 1920, 1930, AND 1937—concluded.

No.	Commodity.	1890.	1900.	1910.	1920.	1930.	1937.
		\$	\$	\$	\$	\$	\$
58	Hardware and cutlery.....	84, 109	278, 054	100, 085	7, 730, 826	1, 743, 096	2, 201, 921
59	Scrap iron and steel.....	26, 172	273, 840	324, 516	4, 300, 663	1, 424, 071	2, 189, 890
60	Cotton products.....	108, 822	471, 439	442, 493	6, 148, 697	842, 588	2, 114, 101
61	Milk, processed.....	1	1	541, 372	8, 517, 771	3, 262, 101	1, 946, 435
62	Timber, square.....	4, 353, 870	2, 013, 746	934, 723	2, 148, 162	4, 235, 309	1, 797, 211
63	Coal.....	2, 447, 936	4, 599, 602	5, 013, 221	13, 183, 666	3, 998, 692	1, 780, 856
64	Sugar and products.....	18, 101	100, 108	153, 357	30, 695, 005	4, 798, 712	1, 683, 217
65	Petroleum products.....	15, 812	1, 653	1, 155	1, 176, 644	2, 527, 178	1, 585, 929
66	Hay.....	1, 068, 554	1, 414, 109	1, 805, 849	4, 087, 670	2, 007, 944	1, 521, 953
67	Wrapping paper.....	1	1	9, 098	2, 917, 197	1, 655, 568	1, 295, 775
68	Tools.....	1	1	69, 301	661, 651	284, 800	1, 203, 200
69	Leather, manufactured.....	152, 314	336, 190	83, 101	6, 314, 884	886, 424	1, 197, 583
70	Butter.....	340, 131	5, 122, 156	1, 010, 274	9, 844, 359	543, 851	1, 183, 633
71	Brass products.....	1	1	1	1, 644, 157	2, 332, 962	1, 141, 648
72	Binder twine.....	1	1	1	5, 530, 908	1, 502, 921	1, 115, 234
73	Sausage casings.....	1	1	1	564, 222	955, 933	1, 104, 913
74	Laths, wood.....	392, 500	749, 301	1, 882, 950	3, 668, 511	3, 095, 417	1, 057, 697
75	Soap.....	3, 733	15, 959	29, 224	1, 000, 722	731, 614	999, 349
76	Paints, pigments, varnishes...	1	7, 599	76, 807	1, 625, 418	503, 453	911, 049
77	Tubes and pipe, iron.....	1	1	1	2, 325, 369	2, 202, 769	884, 497
78	Stationery.....	1	1	23, 380	276, 224	602, 170	883, 782
79	Poles, telegraph and telephone	92, 326	36, 891	56, 177	206, 834	3, 917, 536	812, 456
80	Shooks.....	198, 503	251, 357	240, 721	517, 417	856, 986	735, 009
81	Ale, beer and porter.....	10, 347	6, 272	2, 687	144, 077	1, 995, 990	113, 157
82	Milk and cream, fresh.....	1	1	1	1, 699, 090	5, 379, 174	79, 749

¹ None recorded.

Subsection 8.—Proportions of Trade in Raw and Manufactured Products.

The stage attained in the industrial development of a country is indicated by the character of the goods it imports and exports. In the early years of Canada's development the imports were made up chiefly of manufactured products and the exports of raw and semi-manufactured products. Since the opening of the twentieth century this has been almost reversed, a large percentage of the imports consisting of raw and semi-manufactured products for use in Canadian manufacturing industries, and the exports consisting predominantly of products which have undergone some process of manufacture. In fact, the leading manufactures of Canada are for the processing of raw materials in the production of which Canada excels, and many of these processed domestic products are marketed abroad. Grains and other field crops are easily handled in the raw state and therefore enter into foreign trade largely in that form. Products of the mines and forests, on the other hand, nearly all go through some process of refinement or manufacture before being exported. With the recent relative rise in importance of exports derived from these resources the proportion of processed goods in Canadian exports has tended to increase. Furthermore, as the population of the country grows, the range of elaborated goods formerly imported, which may be manufactured on a competitive basis of mass production within the country, expands, so that there are now many industries in Canada, serving the domestic and even foreign markets, using imported raw materials such as rubber, cotton, and aluminium ore. Since 1929, the rapid decline in commodity prices, which affected raw materials more than manufactured goods, tended to increase the percentages on a value basis of both imports and exports of manufactures, but with the disappearance of this disparity of prices as recovery progresses the influence of this factor is decreasing.

Statement XIII shows how Canada's imports and exports, analysed into the three categories of raw materials, partly manufactured goods, and fully or chiefly

manufactured goods, are distributed among the continents and leading countries of the world. The close of the analysis demonstrates that the imports into Canada from the British Empire, except the United Kingdom, consist chiefly of raw and semi-manufactured products, while the exports to "Other Empire" are made up mainly of fully manufactured products (84.7 p.c. in 1937).

In trade with industrialized continents, such as Europe and Asia, Canadian imports are largely manufactured goods and exports mainly raw materials or partly manufactured goods, while in trade with South America, Oceania, Africa, and North America (if the United States be excluded) the situation is the reverse.

See also Table 15 of this chapter which shows the external trade classified by main groups according to origin and degree of manufacture.

XIII.—CANADA'S IMPORTS AND EXPORTS, BY CONTINENTS AND LEADING COUNTRIES, ACCORDING TO DEGREE OF MANUFACTURE, YEAR ENDED MAR. 31, 1937.

(Figures are preliminary.)

Continent and Country.	Imports.						Exports (Domestic).					
	Raw Materials.		Partly Manufactured.		Fully Manufactured.		Raw Materials.		Partly Manufactured.		Fully Manufactured.	
	Value.	Per cent of Total.	Value.	Per cent of Total.	Value.	Per cent of Total.	Value.	Per cent of Total.	Value.	Per cent of Total.	Value.	Per cent of Total.
	\$'000	p.c.	\$'000	p.c.	\$'000	p.c.	\$'000	p.c.	\$'000	p.c.	\$'000	p.c.
EUROPE.												
Belgium.....	571	8.5	1,038	15.5	5,086	76.0	21,435	91.7	921	3.9	1,030	4.4
Czechoslovakia....	149	6.3	31	1.3	2,185	32.4	3	1.5	140	72.2	51	26.3
Denmark.....	47	29.4	18	11.2	95	59.4	1,196	71.5	157	9.4	320	19.1
France.....	705	10.9	455	7.1	5,294	82.0	5,117	43.7	4,963	42.3	1,638	14.0
Germany.....	1,879	16.1	327	2.8	9,478	81.1	4,546	58.1	3,048	38.9	234	3.0
Greece.....	11	16.4	31	46.3	25	37.3	3,067	99.5	2	0.1	13	0.4
Irish Free State....	16	34.8	1	—	30	65.2	2,922	76.9	115	3.0	763	20.1
Italy.....	419	24.3	159	9.2	1,144	66.5	2,649	56.9	1,863	40.0	144	3.1
Netherlands.....	816	19.2	627	14.7	2,810	66.1	8,290	76.0	1,598	14.6	1,027	9.4
Norway.....	48	6.7	20	2.8	645	90.5	5,275	76.4	177	2.5	1,455	21.1
Sweden.....	51	2.8	12	0.6	1,773	96.6	456	14.1	1,606	49.6	1,175	36.3
Switzerland.....	12	0.5	3	0.1	2,687	99.4	60	11.6	118	22.8	339	65.6
United Kingdom....	12,571	9.7	14,879	11.5	102,074	78.8	193,092	47.3	99,536	24.4	115,369	28.3
Totals, Europe²..	17,765	10.4	17,921	10.5	135,258	79.1	248,816	51.0	114,901	23.5	124,603	25.5
NORTH AMERICA.												
Bermuda.....	103	65.6	5	3.2	49	31.2	441	32.3	36	2.6	886	65.1
Br. W. Indies—												
Barbados.....	1	—	2,127	57.3	1,584	42.7	86	7.2	192	16.2	908	76.6
Jamaica.....	2,524	48.8	2,546	49.2	103	2.0	120	3.6	65	2.0	3,142	94.4
Trinidad—												
Tobago.....	452	16.2	2,153	77.3	182	6.5	167	5.5	187	6.1	2,700	88.4
Other B.W.I....	786	43.8	803	44.8	204	11.4	106	6.7	61	3.9	1,404	89.4
Cuba.....	342	74.8	61	13.4	54	11.8	518	35.6	109	7.5	828	56.9
Mexico.....	777	95.6	1	—	36	4.4	56	2.0	200	7.0	2,598	91.0
Newfoundland.....	1,376	63.6	20	0.9	767	35.5	1,622	21.0	116	1.5	5,990	77.5
United States.....	124,974	31.7	22,164	5.6	247,281	62.7	116,610	26.8	160,175	36.8	158,229	36.4
Totals, North America².....	131,901	32.0	29,885	7.2	250,460	60.8	120,166	26.1	161,260	35.0	178,956	38.9
SOUTH AMERICA.												
Argentina.....	10,830	92.4	3	1	891	7.6	211	5.7	19	0.5	3,497	93.8
Brazil.....	787	86.9	1	—	119	13.1	57	1.5	498	12.8	3,318	85.7
Br. Guiana.....	390	7.7	4,344	86.0	317	6.3	117	9.3	61	4.8	1,087	85.9
Colombia.....	4,195	99.9	2	—	2	0.1	195	17.0	15	1.3	938	81.7
Peru.....	3,870	78.1	5	0.1	1,083	21.8	24	2.2	281	25.7	787	72.1
Venezuela.....	1,007	100.0	1	—	1	—	10	1.0	1	0.1	1,006	98.9
Totals, South America².....	21,143	75.2	4,396	15.6	2,588	9.2	637	4.6	1,000	7.2	12,220	88.2

¹ Too small to be expressed.

² Totals include other countries not specified.

XIII.—CANADA'S IMPORTS AND EXPORTS, BY CONTINENTS AND LEADING COUNTRIES, ACCORDING TO DEGREE OF MANUFACTURE, YEAR ENDED MAR. 31, 1937—concluded.

Continent and Country.	Imports.						Exports (Domestic).					
	Raw Materials.		Partly Manufactured.		Fully Manufactured.		Raw Materials.		Partly Manufactured.		Fully Manufactured.	
	Value.	Per cent of Total.	Value.	Per cent of Total.	Value.	Per cent of Total.	Value.	Per cent of Total.	Value.	Per cent of Total.	Value.	Per cent of Total.
	\$'000	p.c.	\$'000	p.c.	\$'000	p.c.	\$'000	p.c.	\$'000	p.c.	\$'000	p.c.
ASIA.												
Br. India.....	829	10.0	79	0.9	7,418	89.1	19	0.6	667	20.7	2,535	78.7
Br. Str. Settlements.....	7,547	71.6	2,151	20.4	843	8.0	28	1.4	3	0.2	1,908	98.4
Ceylon.....	733	18.5	763	19.3	2,467	62.2	1	0.7	1	0.7	135	98.6
China.....	1,132	26.5	1,416	33.1	1,727	40.4	596	12.3	2,110	42.9	2,193	44.8
Hong Kong.....	314	44.3	1	—	395	55.7	58	4.2	73	5.3	1,242	90.5
Japan.....	888	18.5	262	5.5	3,646	76.0	5,320	24.6	11,907	55.0	4,403	20.4
Philippines.....	204	25.9	566	71.8	18	2.3	16	1.1	11	0.7	1,485	98.2
Totals, Asia ²	12,628	35.6	5,356	15.1	17,462	49.3	6,043	16.8	14,876	41.3	15,085	41.9
OCEANIA.												
Australia.....	1,579	16.7	3,192	33.7	4,699	49.6	1,774	6.6	2,198	8.1	22,982	85.3
Fiji.....	21	0.9	2,370	99.0	4	0.1	6	1.6	108	29.7	250	68.7
New Zealand.....	4,581	85.2	729	13.6	67	1.2	262	2.3	288	2.6	10,637	95.1
Totals, Oceania ² ..	6,225	35.7	6,306	36.1	4,919	28.2	2,535	6.4	2,714	6.7	34,902	86.9
AFRICA.												
Br. E. Africa.....	2,118	74.9	667	23.6	44	1.5	1	—	2	0.4	773	99.6
Br. S. Africa.....	579	39.7	628	43.0	252	17.3	130	0.8	1,055	6.8	14,389	92.4
Br. W. Africa.....	1,113	74.3	385	25.7	1	—	171	19.9	8	0.9	680	79.2
Portuguese Africa.....	12	100.0	1	—	1	—	49	2.8	485	27.4	1,235	69.8
S. Rhodesia.....	1,082	100.0	1	—	1	—	1	—	19	2.3	825	97.7
Totals, Africa ² ...	5,594	73.0	1,731	22.6	338	4.4	2,151	9.6	1,670	7.4	18,647	83.0
Grand Totals...	195,256	29.0	65,595	9.8	411,025	61.2	380,348	35.9	296,421	27.9	384,413	36.2
BRITISH EMPIRE.												
United Kingdom...	12,571	9.7	14,879	11.5	102,074	78.8	193,092	47.3	99,536	24.4	115,369	28.3
Other Br. Empire...	26,180	38.1	22,982	33.5	19,496	28.4	8,089	9.2	5,363	6.1	74,149	84.7
Totals, British Empire.....	38,751	19.6	37,861	19.1	121,570	61.3	201,181	40.6	104,899	21.2	189,518	38.2
FOREIGN COUNTRIES.												
United States.....	124,974	31.7	22,164	5.6	247,281	62.7	116,610	26.8	160,175	36.8	158,229	36.4
Other foreign countries.....	31,531	39.8	5,570	7.0	42,173	53.2	62,557	47.9	31,347	24.0	36,666	28.1
Totals, Foreign Countries.....	156,505	33.0	27,734	5.9	289,454	61.1	179,167	31.7	191,522	33.91	94,895	34.4

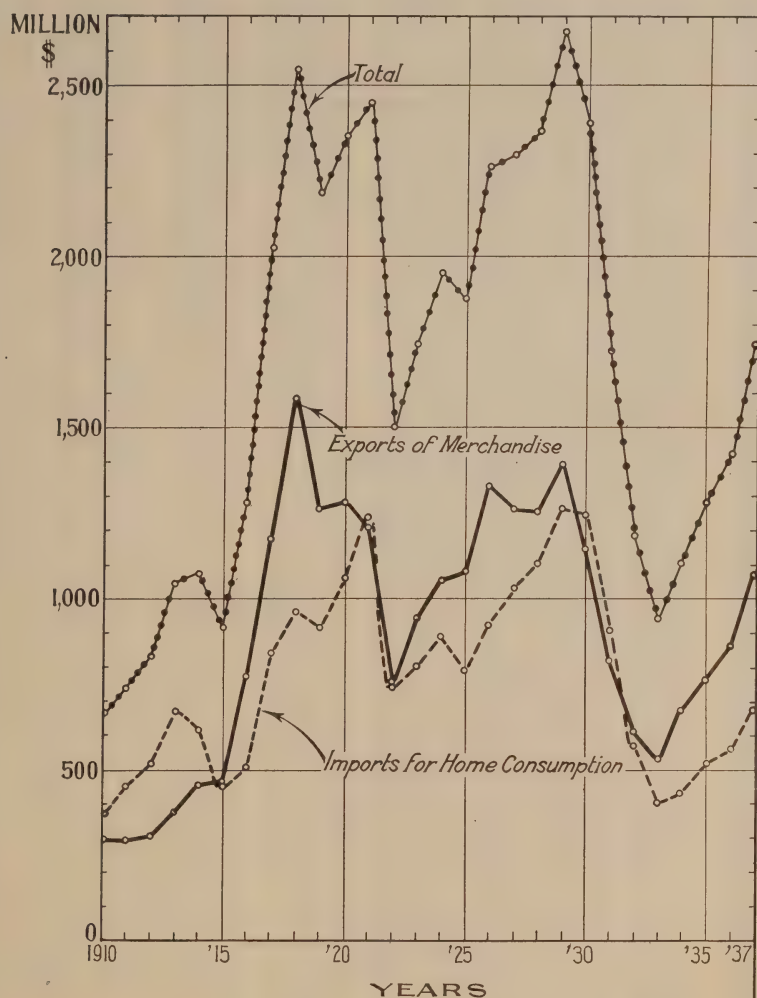
¹ Too small to be expressed.

² Totals include other countries not specified.

Subsection 9.—Main Historical Tables and Tables Showing Current Trends in External Trade.

In this subsection are assembled, in summary form, the main tables of Canadian trade since Confederation, while the figures of trade in the latest years are given in greater detail by countries and commodities.

AGGREGATE EXTERNAL MERCHANDISE TRADE OF CANADA 1910-1937



1.—Aggregate External Merchandise Trade of Canada, fiscal years 1868-1937.

Fiscal Year.	Imports of Merchandise Entered for Home Consumption.			Exports of Merchandise.			Total of Imports for Home Consumption and Exports (Merchandise).
	Dutiable.	Free.	Total.	Canadian Produce.	Foreign Produce.	Total.	
	\$	\$	\$	\$	\$	\$	\$
1868.....	43,655,696	23,434,463	67,090,159	48,504,899	4,196,821	52,701,720	119,791,879
1869.....	41,069,342	22,085,599	63,154,941	52,400,772	3,855,801	56,256,573	119,411,514
1870.....	45,127,421	21,774,653	66,902,074	59,043,590	6,527,622	65,571,212	132,473,286
1871.....	60,094,362	24,120,026	84,214,388	57,630,024	9,853,244	67,483,268	151,697,656
1872.....	68,276,157	36,679,210	104,955,367	65,831,083	12,798,182	78,629,265	183,584,632
1873.....	71,198,176	53,310,953	124,509,129	76,538,025	9,405,910	85,943,935	210,453,064
1874.....	76,232,530	46,948,357	123,180,887	76,741,997	10,614,096	87,356,093	210,536,980
1875.....	78,138,511	39,270,057	117,408,568	69,709,823	7,137,319	76,847,142	194,255,710
1876.....	60,238,297	32,274,810	92,513,107	72,491,437	7,234,961	79,726,398	172,239,505
1877.....	60,916,770	33,209,624	94,126,394	68,030,546	7,111,108	75,141,654	169,268,048
1878.....	59,773,039	30,622,812	90,395,851	67,989,800	11,164,878	79,154,678	169,550,529
1879.....	55,426,836	23,275,683	78,702,519	62,431,025	8,355,644	70,786,669	149,489,188
1880.....	54,182,967	15,717,575	69,900,542	72,899,697	13,240,006	86,139,703	156,040,245
1881.....	71,620,725	18,867,604	90,488,329	83,944,701	13,375,117	97,319,818	187,808,147
1882.....	85,757,433	25,387,751	111,145,184	94,137,657	7,628,453	101,766,110	212,911,294
1883.....	91,588,339	30,273,157	121,861,496	87,702,431	9,751,773	97,454,204	219,315,700
1884.....	80,010,498	25,962,480	105,972,978	79,833,098	9,389,106	89,222,204	195,195,182
1885.....	73,269,618	26,486,157	99,755,775	79,131,735	8,079,646	87,211,381	186,967,156
1886.....	70,658,819	25,333,318	95,992,137	77,756,704	7,438,079	85,194,783	181,186,902
1887.....	78,120,679	26,986,531	105,107,210	80,900,909	8,549,333	89,510,242	194,617,452
1888.....	69,645,824	31,025,804	100,671,628	81,382,072	8,803,394	90,185,466	190,857,094
1889.....	74,475,139	34,623,057	109,098,196	80,272,456	6,938,455	87,210,911	196,309,107
1890.....	77,106,286	34,576,287	111,682,573	85,257,586	9,051,781	94,309,367	205,991,940
1891.....	74,536,036	36,997,918	111,533,954	88,671,738	8,798,631	97,470,369	209,034,323
1892.....	69,160,737	45,999,676	115,160,413	99,032,466	13,121,791	112,154,257	227,314,670
1893.....	69,873,571	45,297,259	115,170,830	105,488,798	8,941,856	114,430,654	229,601,484
1894.....	62,779,182	46,291,729	109,070,911	103,851,764	11,833,805	115,685,569	224,756,480
1895.....	58,557,655	42,118,236	100,675,891	102,828,441	6,485,043	109,313,484	209,989,375
1896.....	67,239,759	38,121,402	105,361,161	109,707,805	6,606,738	116,314,543	221,675,704
1897.....	66,220,765	40,397,062	106,617,827	123,632,540	10,825,163	134,457,703	241,075,530
1898.....	74,625,088	51,682,074	126,307,162	144,548,662	14,980,883	159,529,545	285,836,707
1899.....	89,433,172	59,989,244	149,422,416	137,360,792	17,520,088	154,880,880	304,303,296
1900.....	104,346,795	68,304,881	172,651,676	168,972,301	14,265,254	183,237,555	355,889,231
1901.....	105,969,756	71,961,163	177,930,919	177,431,386	17,077,757	194,509,143	372,440,062
1902.....	118,657,496	78,800,308	196,737,804	196,019,763	13,951,101	209,970,864	406,708,668
1903.....	136,796,065	88,298,744	225,094,809	214,401,674	10,828,087	225,229,761	450,324,570
1904.....	148,909,576	94,999,839	243,909,415	198,414,439	12,641,239	211,055,678	454,965,093
1905.....	150,928,787	101,035,427	251,964,214	190,854,946	10,617,115	201,472,061	453,436,275
1906.....	173,046,109	110,694,171	283,740,280	235,483,956	11,173,846	246,657,802	530,398,082
1907.....	152,065,529	98,160,306	250,225,835	180,545,306	11,541,927	192,087,233	442,313,068
1908.....	218,160,047	134,380,832	352,540,879	246,960,968	16,407,984	263,368,952	615,909,831
1909.....	175,014,160	113,580,036	288,594,196	242,003,584	17,318,782	259,322,366	548,516,562
1910.....	227,264,346	143,053,853	370,318,199	279,247,551	19,516,442	298,763,993	669,082,192
1911.....	282,723,812	170,000,791	452,724,603	274,316,553	15,683,657	290,000,210	742,724,813
1912.....	335,304,060	187,100,615	522,404,675	290,223,857	17,492,294	307,716,151	830,120,826
1913.....	441,606,885	229,600,349	671,207,234	355,754,600	21,313,755	377,068,355	1,048,275,589
1914.....	410,258,744	208,935,254	619,193,998	431,588,439	23,848,785	455,437,224	1,074,631,222
1915.....	279,792,195	176,163,713	455,955,908	409,418,836	52,023,673	461,442,509	917,398,417
1916.....	289,366,527	218,834,607	508,201,134	471,610,638	37,689,432	509,300,071	1,287,501,204
1917.....	461,733,609	384,717,269	846,450,878	1,151,375,768	27,835,332	1,179,211,100	2,025,661,978
1918.....	542,341,522	421,191,056	963,532,578	1,540,027,788	46,142,004	1,586,169,792	2,549,702,307
1919.....	526,494,658	393,217,047	919,711,705	1,216,443,806	52,321,479	1,268,765,285	2,186,476,990
1920.....	693,655,165	392,872,958	1,086,528,123	1,239,492,098	47,166,611	1,286,658,709	2,351,186,832
1921.....	847,561,406	392,597,476	1,240,158,882	1,189,163,701	21,264,418	1,210,428,119	2,460,587,001
1922.....	495,626,323	252,178,009	747,804,332	740,240,680	13,686,329	753,927,009	1,501,731,341
1923.....	537,258,782	265,320,462	802,579,244	931,451,443	13,844,944	945,295,837	1,747,875,081
1924.....	591,299,094	302,067,773	893,366,867	1,045,351,056	13,412,241	1,058,763,297	1,952,130,164
1925.....	516,014,455	280,918,082	796,932,537	1,069,067,353	12,294,290	1,081,361,643	1,878,294,180
1926.....	583,051,670	344,277,062	927,328,732	1,320,568,147	13,344,346	1,333,912,493	2,261,241,225
1927.....	659,897,013	370,995,492	1,030,892,505	1,254,168,897	15,415,636	1,269,584,533	2,300,477,038
1928.....	710,050,228	398,906,238	1,108,956,466	1,233,903,994	22,248,691	1,256,152,685	2,365,109,151
1929.....	821,075,430	444,603,661	1,265,679,091	1,368,259,131	25,186,403	1,393,445,534	2,659,124,625
1930.....	819,230,474	429,043,108	1,248,273,582	1,120,258,302	24,679,768	1,144,938,070	2,393,211,652
1931.....	574,090,230	332,522,465	906,612,695	799,742,667	17,285,381	817,028,048	1,723,640,743
1932.....	388,498,048	190,005,856	578,503,904	600,031,812	11,221,215	611,253,027	1,189,756,931
1933.....	256,377,100	150,006,644	406,383,744	528,064,278	6,913,842	534,978,120	941,361,864
1934.....	250,476,412	183,322,213	433,798,625	665,954,071	6,311,324	672,265,395	1,106,064,020
1935.....	301,245,922	221,185,231	522,431,153	756,625,925	7,658,963	764,284,888	1,286,716,041
1936.....	309,933,096	252,785,967	562,719,063	849,030,417	13,441,659	862,472,076	1,425,191,139
1937.....	369,933,634	301,941,932	671,875,566	1,061,181,906	13,062,314	1,074,244,220	1,746,119,786

¹ Nine months.

2.—Ratio of Exports to Imports and Values per Capita of Exports, Imports, and Total Trade, fiscal years 1868-1937.

Fiscal Year.	Excess of Imports Entered for Consumption over Total Exports.	Excess of Total Exports over Imports Entered for Consumption.	Percent- age Rate of Total Exports to Imports Entered for Con- sumption.	Values per Capita.		
				Exports of Canadian Produce.	Total Imports.	Total Trade. ¹
	\$	\$	p.c.	\$	\$	\$
1868.....	14,388,439	-	78.55	14.38	19.90	34.28
1869.....	6,898,368	-	89.07	15.35	18.50	33.85
1870.....	1,330,862	-	98.01	17.09	19.37	36.46
1871.....	16,731,120	-	80.13	16.38	23.94	40.32
1872.....	26,326,102	-	74.92	18.23	29.06	47.29
1873.....	38,565,194	-	69.03	20.87	33.94	54.81
1874.....	35,824,794	-	70.92	20.06	32.20	52.26
1875.....	40,561,426	-	64.45	17.93	30.21	48.14
1876.....	12,786,709	-	86.18	18.36	23.43	41.79
1877.....	18,984,740	-	79.83	16.97	23.45	40.42
1878.....	11,241,173	-	87.56	16.67	22.16	38.83
1879.....	7,915,850	-	89.94	15.06	18.98	34.04
1880.....	-	16,239,161	123.23	17.29	16.58	33.87
1881.....	-	6,831,489	107.05	19.36	20.86	40.22
1882.....	9,379,074	-	91.57	21.47	25.35	46.82
1883.....	24,407,292	-	79.97	19.78	27.49	47.27
1884.....	16,750,774	-	84.19	17.80	23.63	41.43
1885.....	12,544,394	-	87.42	17.43	21.98	39.41
1886.....	10,797,354	-	88.75	16.94	20.92	37.86
1887.....	15,596,968	-	85.16	17.46	22.66	40.12
1888.....	10,486,162	-	89.58	17.36	21.47	38.83
1889.....	21,187,285	-	79.93	16.94	23.02	39.96
1890.....	17,373,206	-	84.44	17.79	23.30	41.09
1891.....	14,063,585	-	87.39	18.31	23.02	41.33
1892.....	3,006,156	-	97.39	20.26	23.55	43.81
1893.....	740,176	-	99.36	21.37	23.33	44.70
1894.....	-	6,614,658	106.06	20.84	21.88	42.72
1895.....	-	8,637,593	108.58	20.43	20.00	40.43
1896.....	-	10,453,382	110.40	21.57	20.72	42.29
1897.....	-	27,839,376	126.11	24.04	20.73	44.77
1898.....	-	33,222,383	126.30	27.80	24.29	52.09
1899.....	-	5,458,464	103.65	26.12	28.41	54.53
1900.....	-	10,585,879	106.13	31.75	32.44	64.19
1901.....	-	16,578,224	109.32	32.84	33.13	65.97
1902.....	-	13,233,060	106.73	35.43	35.56	70.99
1903.....	-	134,952	100.06	37.79	39.68	77.47
1904.....	32,853,737	-	86.53	34.06	41.87	75.93
1905.....	50,492,153	-	79.96	31.85	42.05	73.90
1906.....	37,082,478	-	86.93	38.16	45.98	84.14
1907 (9 months).....	58,138,602	-	76.77	28.65	39.70	68.35
1908.....	89,171,927	-	74.71	38.05	54.31	92.36
1909.....	28,671,830	-	90.06	36.24	43.10	79.34
1910.....	71,554,200	-	80.68	40.37	53.54	93.91
1911.....	162,724,893	-	64.06	38.06	62.82	100.88
1912.....	214,688,524	-	58.90	39.40	70.93	110.33
1913.....	294,138,879	-	56.18	47.26	89.17	136.43
1914.....	163,756,774	-	73.56	56.10	80.49	136.59
1915.....	-	5,486,601	101.20	52.08	57.99	110.07
1916.....	-	271,098,936	153.34	92.29	63.24	155.53
1917.....	-	332,760,222	139.31	140.75	103.43	244.23
1918.....	-	622,637,214	164.62	184.91	115.69	300.60
1919.....	-	349,053,580	137.95	143.48	108.48	251.96
1920.....	-	222,130,586	120.87	143.61	123.34	266.95
1921.....	29,730,763	-	97.60	135.32	141.20	276.52
1922.....	-	6,122,677	100.82	83.00	83.84	166.84
1923.....	-	142,716,593	117.78	103.39	89.09	192.48
1924.....	-	165,396,430	118.51	114.35	97.72	212.07
1925.....	-	284,429,106	135.69	115.04	85.76	200.80
1926.....	-	406,583,761	144.50	139.73	98.12	237.85
1927.....	-	238,692,028	123.22	130.14	106.97	237.11
1928.....	-	147,196,219	113.25	125.46	112.76	238.22
1929.....	-	127,766,443	110.08	136.43	126.20	262.63
1930.....	103,335,512	-	91.72	109.75	122.28	232.03
1931.....	89,584,647	-	90.12	77.08	87.37	164.45
1932.....	-	32,749,123	105.63	57.11	55.07	112.18
1933.....	-	128,549,376	131.60	49.44	38.05	87.49
1934.....	-	238,466,770	154.98	61.52	40.08	101.60
1935.....	-	241,853,735	146.30	69.11	47.71	116.82
1936.....	-	299,753,013	153.15	76.51	50.71	127.22
1937.....	-	402,368,654	159.89	96.23	60.92	157.15

¹Not including exports of foreign produce.

3.—Movement of Coin and Bullion, fiscal years 1868-1937.

Fiscal Year.	Total Imports.	Exports.			Total Imports and Exports of Coin and Bullion.
		Canadian.	Foreign.	Total.	
	\$	\$	\$	\$	\$
1868.....	4,895,147	4,866,168	Nil	4,866,168	9,761,315
1869.....	4,247,229	4,218,208	Nil	4,218,208	8,465,437
1870.....	4,335,529	8,002,278	Nil	8,002,278	12,337,807
1871.....	2,733,094	6,690,350	Nil	6,690,350	9,423,444
1872.....	2,753,749	4,010,398	Nil	4,010,398	6,764,147
1873.....	3,005,465	3,845,987	Nil	3,845,987	6,851,452
1874.....	4,223,282	1,995,835	Nil	1,995,835	6,219,117
1875.....	2,210,089	1,039,837	Nil	1,039,837	3,249,926
1876.....	2,220,111	1,240,037	Nil	1,240,037	3,460,148
1877.....	2,174,089	Nil	733,739	733,739	2,907,828
1878.....	803,726	Nil	168,989	168,989	972,715
1879.....	1,639,089	Nil	704,586	704,586	2,343,675
1880.....	1,881,807	Nil	1,771,755	1,771,755	3,653,562
1881.....	1,123,275	Nil	971,005	971,005	2,094,280
1882.....	1,503,743	Nil	371,093	371,093	1,874,836
1883.....	1,275,523	Nil	631,600	631,600	1,907,123
1884.....	2,207,666	Nil	2,184,292	2,184,292	4,391,958
1885.....	2,954,244	Nil	2,026,980	2,026,980	4,981,224
1886.....	3,610,557	Nil	56,531	56,531	3,667,088
1887.....	532,218	Nil	5,569	5,569	537,787
1888.....	2,175,472	Nil	17,534	17,534	2,193,006
1889.....	575,251	Nil	1,978,256	1,978,256	2,553,507
1890.....	1,083,011	Nil	2,439,782	2,439,782	3,522,793
1891.....	1,811,170	129,328	817,599	946,927	2,758,097
1892.....	1,818,530	306,447	1,502,671	1,809,118	3,627,648
1893.....	6,534,200	309,459	3,824,239	4,133,698	10,667,898
1894.....	4,023,072	310,006	1,529,374	1,839,380	5,862,452
1895.....	4,576,620	256,571	4,068,788	4,325,319	8,901,939
1896.....	5,226,319	207,532	4,491,777	4,699,309	9,925,628
1897.....	4,676,194	327,298	3,165,252	3,492,550	8,168,744
1898.....	4,390,844	1,045,723	3,577,415	4,623,138	9,013,982
1899.....	4,629,177	1,101,245	2,914,780	4,016,025	8,645,202
1900.....	8,152,640	1,670,068	6,987,100	8,657,168	16,809,808
1901.....	3,307,069	Nil	1,978,489	1,978,489	5,285,558
1902.....	6,053,791	Nil	1,669,422	1,669,422	7,723,213
1903.....	8,695,707	Nil	619,963	619,963	9,315,670
1904.....	7,554,917	Nil	2,465,557	2,465,557	10,020,474
1905.....	9,961,340	Nil	1,844,811	1,844,811	11,806,151
1906.....	6,620,527	Nil	9,928,828	9,928,828	16,549,355
1907 (9 months).....	7,029,047	Nil	13,189,964	13,189,964	20,219,011
1908.....	5,887,737	Nil	16,637,654	16,637,654	22,525,391
1909.....	9,611,761	2	1,589,791	1,589,793	11,201,554
1910.....	5,514,817	Nil	2,594,536	2,594,536	8,109,353
1911.....	9,226,715	Nil	7,196,155	7,196,155	16,422,870
1912.....	25,077,515	Nil	7,601,099	7,601,099	32,678,614
1913.....	4,309,811	Nil	16,163,702	16,163,702	20,473,513
1914.....	14,498,451	1,219	23,559,485	23,560,704	38,059,155
1915.....	131,483,396	667	29,365,701	29,366,368	160,849,764
1916.....	33,876,227	315	103,572,117	103,572,432	137,448,659
1917.....	26,986,548	86,087	196,460,961	196,547,048	223,533,596
1918.....	11,290,341	290,281	3,201,122	3,491,403	14,781,744
1919.....		1			
1920.....	50,463,494	230,117	49,815,279	50,045,396	100,508,890
1921.....	7,218,775	24,368,846	9,815,827	34,184,673	41,403,448
1922.....	4,788,246	18,085,901	5,251,430	23,337,331	28,125,577
1923.....	26,455,231	1,766,060	25,782,806	27,548,866	54,004,097
1924.....	3,496,705	12,521,619	12,924,211	25,445,830	28,942,535
1925.....	4,142,292	2,948,353	1,971,620	4,919,973	9,062,265
1926.....	51,437,859	40,668,052	25,242,303	65,910,355	117,348,214
1927.....	46,086,458	Nil	43,040,819	43,040,819	89,127,277
1928.....	31,808,807	25,301,005	31,031,311	56,332,316	87,641,123
1929.....	29,560,310	32,383,006	58,299,998	90,683,004	120,243,314
1930.....	2,716,218	410,435	4,494,783	4,905,218	7,621,436
1931.....	39,126,924	80	44,996,512	44,996,592	84,123,516
1932.....	1,815,016	25,291,905	22,860,214	48,152,119	49,967,135
1933.....	1,011,685	3,876,674	6,842,342	10,719,016	11,730,701
1934.....	849,290	12,452,653	2,749,629	15,202,282	16,051,572
1935.....	730,612	28,196	803,782	831,978	1,562,590
1936.....	1,281,141	51,957	14,498,433	14,550,390	15,831,531
1937.....	1,730,595	59,178	1,785,452	1,844,630	3,575,225

1 No record of imports and exports of coin and bullion for 1919.

4.—Duties Collected on Exports, 1868-92, and on Imports for Home Consumption, 1868-1937, with Percentages of Expense of Collection to Gross Customs Revenue Collected, fiscal years 1868-1937.

NOTE.—Duties on exports were not collected after the year 1892. The figures in this table are the gross figures of duties collected; the net national revenue from customs taxation, because of the drawbacks paid where commodities on which duties have been collected are afterwards exported in a more highly manufactured state, is considerably smaller. For net customs revenue, see statistics of revenue from customs duties, in the historical revenue table in Chapter XXI on Public Finance.

Fiscal Year.	Duties Collected on Exports.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.	Fiscal Year.	Duties Collected on Exports.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.
	\$	\$	p.c.		\$	\$	p.c.
1868.....	17,986	8,801,446	5.99	1881.....	8,141	18,492,645	3.87
1869.....	14,403	8,284,507	7.09	1882.....	8,810	21,700,028	3.33
1870.....	37,912	9,425,028	5.41	1883.....	9,756	23,162,553	3.26
1871.....	36,066	11,807,590	4.21	1884.....	8,515	20,156,448	3.96
1872.....	24,809	13,020,684	4.04	1885.....	12,305	19,121,254	4.14
1873.....	20,152	12,997,578	4.35	1886.....	20,726	19,427,398	4.10
1874.....	14,565	14,407,318	4.55	1887.....	31,397	22,438,309	3.64
1875.....	7,243	15,354,139	4.44	1888.....	21,772	22,187,869	3.81
1876.....	4,500	12,828,614	5.61	1889.....	42,207	23,742,317	3.62
1877.....	4,103	12,544,348	5.75	1890.....	93,674	23,921,234	3.63
1878.....	4,161	12,791,532	5.58	1891.....	64,803	23,416,266	3.83
1879.....	4,272	12,935,269	5.56	1892.....	108	20,550,474	4.39
1880.....	8,896	14,129,953	5.04				

Fiscal Year.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.	Fiscal Year.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.	Fiscal Year.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.
	\$	p.c.		\$	p.c.		\$	p.c.
1893.....	21,161,711	4.26	1908...	58,331,074	3.30	1923...	133,803,370 ¹	2.58
1894.....	19,379,822	4.75	1909...	48,059,792	4.15	1924...	135,122,345	2.49
1895.....	17,887,269	5.13	1910...	61,024,239	3.31	1925...	120,222,454	3.09
1896.....	20,219,037	4.43	1911...	73,312,368	2.98	1926...	143,933,111	2.83
1897.....	19,891,997	4.73	1912...	87,576,037	2.78	1927...	158,966,367	2.66
1898.....	22,157,788	4.37	1913...	115,063,688	2.74	1928...	171,872,768	3.09
1899.....	25,734,229	4.02	1914...	107,180,578	3.59	1929...	200,479,505	3.02
1900.....	28,889,110	3.71	1915...	79,205,910 ¹	4.77	1930...	199,011,628	3.30
1901.....	29,106,980	3.86	1916...	103,940,101 ¹	3.55	1931...	149,250,992	4.45
1902.....	32,425,532	3.62	1917...	147,631,455 ¹	2.54	1932...	113,997,851	4.87
1903.....	37,110,355	3.31	1918...	161,595,629 ¹	2.51	1933...	77,271,965	3.86
1904.....	40,954,349	3.31	1919...	158,046,334 ¹	3.13	1934...	73,154,472	3.37
1905.....	42,024,340	3.49	1920...	187,524,182 ¹	2.49	1935...	84,627,473	2.97
1906.....	46,671,101	3.31	1921...	179,667,683 ¹	3.36	1936...	82,784,317	3.20
1907 ² ...	40,290,172	3.04	1922...	121,487,394 ¹	3.22	1937...	92,282,590	2.71

¹ Includes war tax.² Nine months.

5.—Exports to the United Kingdom, to the United States, and to Other Countries, of Merchandise the Produce of Canada, fiscal years 1868-1937.

Fiscal Year.	Exports to United Kingdom.	Per Cent Cdn. Exports to U.K. to Total Cdn. Exports (mdse.).	Exports to United States.	Per Cent Cdn. Exports to U.S. to Total Cdn. Exports (mdse.).	Exports to Other Countries.	Total Exports of Canadian Produce.
	\$	p.c.	\$	p.c.	\$	\$
1868.....	17,905,808	36.9	25,349,568	52.3	5,249,433	48,504,809
1869.....	20,486,389	39.1	26,717,656	51.0	5,196,727	52,400,772
1870.....	22,512,991	38.1	30,361,328	51.4	6,169,271	59,043,590
1871.....	21,733,556	37.7	29,164,358	50.6	6,732,110	57,630,024
1872.....	25,223,785	38.3	32,871,496	49.9	7,735,802	65,831,083
1873.....	31,402,234	41.0	36,714,144	48.0	8,421,647	76,538,025
1874.....	35,769,190	46.6	33,195,805	43.3	7,777,002	76,741,997
1875.....	34,199,134	49.1	27,902,748	40.0	7,607,941	69,709,823
1876.....	34,379,005	47.4	30,080,738	41.5	8,031,694	72,491,437
1877.....	35,491,671	52.2	24,326,332	35.8	8,212,543	68,030,546
1878.....	35,861,110	52.7	24,381,009	35.9	7,747,681	67,989,800
1879.....	29,393,424	47.1	25,491,356	40.8	7,546,245	62,431,025
1880.....	35,208,031	48.3	29,566,211	40.6	8,125,455	72,899,697
1881.....	42,637,219	50.8	34,038,431	40.5	7,269,051	83,944,701
1882.....	39,816,813	42.3	45,782,584	48.6	8,538,260	94,137,657
1883.....	39,538,067	45.1	39,513,225	45.1	8,651,139	87,702,431
1884.....	37,410,870	46.9	34,332,641	43.0	8,089,587	79,833,098
1885.....	36,479,051	46.1	35,566,810	44.9	7,085,874	79,131,735
1886.....	36,694,263	47.2	34,284,490	44.1	6,777,951	77,756,704
1887.....	38,714,331	47.8	35,269,922	43.6	6,976,656	80,960,909
1888.....	33,648,284	41.3	40,407,483	49.6	7,326,305	81,382,972
1889.....	33,504,281	41.7	39,519,940	49.2	7,248,235	80,272,456
1890.....	41,499,149	48.7	36,213,279	42.5	7,545,158	85,257,586
1891.....	43,243,784	48.8	37,743,430	42.6	7,684,524	88,671,738
1892.....	54,949,055	55.5	34,666,070	35.0	9,417,341	99,032,466
1893.....	58,409,606	55.4	37,296,110	35.4	9,783,082	105,488,798
1894.....	60,878,056	58.6	32,562,509	31.4	10,411,199	103,851,764
1895.....	57,903,564	56.3	35,603,863	34.6	9,321,014	102,828,441
1896.....	62,717,941	57.2	37,789,481	34.4	9,200,383	109,707,805
1897.....	69,533,852	56.2	43,664,187	35.3	10,434,501	123,632,540
1898.....	93,065,019	64.4	38,989,525	27.0	12,494,118	144,548,662
1899.....	85,113,681	62.0	39,326,485	29.0	12,920,626	137,360,792
1900.....	96,562,875	57.1	57,996,488	34.2	14,412,938	168,972,301
1901.....	92,857,525	52.3	67,983,673	38.3	16,590,188	177,431,386
1902.....	109,347,345	55.8	66,567,784	34.0	20,104,634	196,019,763
1903.....	125,199,980	58.4	67,766,367	31.6	21,435,327	214,401,674
1904.....	110,120,892	55.5	66,856,885	33.7	21,436,662	198,414,439
1905.....	97,114,867	50.9	70,426,765	36.9	23,313,314	190,854,946
1906.....	127,456,465	54.1	83,546,306	35.5	24,481,185	235,483,956
1907 (9 months).....	98,691,186	54.7	62,180,439	34.4	19,673,681	180,545,306
1908.....	126,194,124	51.1	90,814,871	36.8	29,951,973	246,960,968
1909.....	126,384,724	52.1	85,334,806	35.2	30,884,054	242,603,584
1910.....	139,482,945	50.0	104,199,675	37.3	35,564,931	279,247,551
1911.....	132,156,924	48.2	104,115,823	38.0	38,043,806	274,316,553
1912.....	147,240,413	50.7	102,041,222	35.2	40,942,222	290,223,857
1913.....	170,161,903	47.8	139,725,953	39.3	45,866,744	355,754,600
1914.....	215,253,969	49.9	163,372,825	37.9	52,961,645	431,588,439
1915.....	186,668,554	45.6	173,320,216	42.3	49,430,066	409,418,836
1916.....	451,852,399	60.9	201,106,488	27.1	88,651,751	741,610,638
1917.....	742,147,537	60.5	280,616,330	24.4	128,611,901	1,151,375,768
1918.....	845,480,069	54.9	417,233,287	27.0	277,314,432	1,540,027,788
1919.....	540,750,977	44.5	454,873,170	37.4	220,819,659	1,216,443,806
1920.....	489,152,637	39.5	464,028,183	37.4	286,311,278	1,239,492,098
1921.....	312,844,871	26.3	542,322,967	45.6	333,995,863	1,189,163,701
1922.....	299,361,675	40.4	292,588,643	39.5	148,290,362	740,240,680
1923.....	379,067,445	40.7	369,080,218	39.6	183,303,780	931,451,443
1924.....	360,057,782	34.4	430,707,544	41.2	254,585,730	1,045,351,056
1925.....	395,843,433	37.0	417,417,144	39.0	255,806,776	1,069,067,353
1926.....	508,237,560	38.5	480,199,723	36.4	332,130,864	1,320,568,147
1927.....	446,872,851	35.6	468,434,180	37.3	338,861,866	1,254,168,897
1928.....	410,691,392	33.3	483,700,034	39.2	339,512,568	1,233,903,994
1929.....	429,730,485	31.4	504,161,604	36.8	434,367,042	1,368,259,131
1930.....	281,745,965	25.1	515,049,763	46.0	323,462,574	1,120,258,302
1931.....	219,246,499	27.4	349,660,563	43.7	230,835,605	799,742,667
1932.....	174,043,725	29.0	257,770,160	42.9	168,217,927	600,031,812
1933.....	184,261,019	34.9	197,424,723	37.4	146,278,536	528,064,278
1934.....	288,582,666	43.3	220,072,810	33.0	157,298,595	665,954,071
1935.....	290,885,237	38.4	304,721,354	40.3	161,019,334	756,625,925
1936.....	321,556,798	37.9	360,302,426	42.4	167,171,193	849,030,417
1937.....	407,996,698	38.4	435,014,544	41.0	218,170,664	1,061,181,906

6.—Imports from the United Kingdom, from the United States, and from Other Countries, of Merchandise Entered for Home Consumption, fiscal years 1868-1937.

Fiscal Year.	Imports from United Kingdom.	Per Cent Imports from U.K. to Total Imports (mdse.).	Imports from United States.	Per Cent Imports from U.S. to Total Imports (mdse.).	Imports from Other Countries.	Total Imports for Home Consumption.
	\$	p.c.	\$	p.c.	\$	\$
1868.....	37,617,325	56.1	22,660,132	33.8	6,812,702	67,090,159
1869.....	35,496,764	56.2	21,497,380	34.0	6,160,797	63,154,941
1870.....	37,537,095	56.1	21,697,237	32.4	7,667,742	66,902,074
1871.....	48,498,202	57.6	27,185,586	32.3	8,530,600	84,214,388
1872.....	62,209,254	59.7	33,741,995	32.1	9,004,118	104,955,367
1873.....	67,996,945	54.6	45,189,110	36.3	11,323,074	124,509,129
1874.....	61,424,407	49.9	51,706,906	42.0	10,049,574	123,180,887
1875.....	60,009,084	51.1	48,930,358	41.7	8,469,126	117,408,568
1876.....	40,479,253	43.8	44,099,880	47.7	7,933,974	92,513,107
1877.....	39,331,621	41.8	49,376,008	52.5	5,418,765	94,126,394
1878.....	37,252,769	41.2	48,002,875	53.1	5,140,207	90,395,851
1879.....	30,967,778	39.3	42,170,306	53.6	5,564,435	73,702,519
1880.....	33,764,439	48.3	28,193,783	40.3	7,942,320	69,900,542
1881.....	42,885,142	47.4	36,338,701	40.6	11,264,486	90,488,329
1882.....	50,356,268	45.3	47,052,935	42.3	13,735,981	111,145,184
1883.....	51,679,762	42.4	55,147,243	45.3	15,034,491	121,861,496
1884.....	41,925,121	39.6	49,785,888	47.0	14,261,969	105,972,978
1885.....	40,031,448	40.1	45,576,510	45.7	14,147,817	99,755,775
1886.....	39,033,006	40.7	42,818,651	44.6	14,140,480	95,992,137
1887.....	44,741,350	42.6	44,795,908	42.6	15,569,952	105,107,210
1888.....	39,167,644	38.9	46,440,296	46.1	15,063,638	100,671,628
1889.....	42,251,189	38.7	50,029,419	45.9	16,817,588	109,098,196
1890.....	43,277,009	28.8	51,365,661	46.0	17,039,903	111,682,573
1891.....	42,018,943	37.7	52,033,477	46.7	17,481,534	111,533,954
1892.....	41,063,711	35.7	51,742,132	44.9	22,354,570	115,160,413
1893.....	42,529,340	36.9	52,339,796	45.4	20,301,694	115,170,830
1894.....	37,035,963	34.0	50,746,091	46.5	21,288,857	109,070,911
1895.....	31,059,332	30.9	50,179,004	49.8	19,437,555	100,675,891
1896.....	32,824,605	31.2	53,529,390	50.8	19,007,266	105,361,161
1897.....	29,401,188	27.6	57,023,342	53.5	20,193,297	106,617,827
1898.....	32,043,461	25.4	74,824,923	59.2	19,438,778	126,307,162
1899.....	36,966,552	24.7	88,506,881	59.2	23,948,983	149,422,416
1900.....	44,280,041	25.7	102,224,917	59.2	26,146,718	172,651,676
1901.....	42,820,334	24.1	107,377,906	60.3	27,732,679	177,930,919
1902.....	49,022,726	25.0	115,001,533	58.4	32,713,545	196,737,804
1903.....	58,793,038	26.2	129,071,197	57.3	37,230,574	225,094,809
1904.....	61,724,893	25.3	143,329,697	58.7	38,854,825	243,909,415
1905.....	60,342,704	24.0	152,778,576	60.6	38,842,934	251,964,214
1906.....	69,183,915	24.4	169,256,452	59.6	45,299,913	283,740,280
1907 (9 months).....	64,415,756	25.8	149,085,577	59.5	36,724,502	250,225,835
1908.....	94,417,320	26.8	205,309,803	58.2	52,813,756	352,540,879
1909.....	70,682,600	24.5	170,432,360	59.0	47,479,236	288,594,196
1910.....	95,337,058	25.8	218,004,556	58.9	56,976,585	370,318,199
1911.....	109,934,753	24.3	275,824,265	60.8	66,965,585	452,724,603
1912.....	116,906,360	22.4	331,384,657	63.4	74,113,658	522,404,675
1913.....	138,742,644	20.7	436,887,315	65.0	95,577,275	671,207,234
1914.....	132,070,406	21.4	396,302,138	64.0	90,821,454	619,193,998
1915.....	90,157,204	19.8	297,142,059	65.2	68,656,645	455,955,908
1916.....	77,404,361	15.2	370,880,549	73.0	59,916,224	508,201,134
1917.....	107,096,735	12.7	665,312,759	78.6	74,041,338	846,450,878
1918.....	81,324,283	8.4	792,894,957	82.3	89,313,384	963,532,578
1919.....	73,035,118	8.0	750,203,024	81.6	96,473,563	919,711,705
1920.....	126,362,631	11.9	801,097,318	75.3	137,068,174	1,064,528,123
1921.....	213,973,562	17.3	856,176,820	69.0	170,008,500	1,240,158,882
1922.....	117,135,343	15.7	515,958,196	69.0	114,710,793	747,804,332
1923.....	141,330,143	17.6	540,989,738	67.4	120,259,363	802,579,244
1924.....	153,586,690	17.2	601,256,447	67.3	138,523,730	893,366,867
1925.....	151,083,946	19.0	509,780,009	64.0	136,068,582	796,932,537
1926.....	163,731,210	17.6	608,618,542	65.6	154,978,980	927,328,732
1927.....	163,939,065	15.9	687,022,521	66.6	179,930,919	1,030,892,505
1928.....	186,435,824	16.7	718,896,270	64.9	203,624,372	1,108,956,466
1929.....	194,041,381	15.3	868,012,229	68.6	203,625,481	1,265,679,091
1930.....	189,179,738	15.2	847,442,037	67.9	211,651,807	1,248,273,582
1931.....	149,497,392	16.5	584,407,018	64.5	172,708,285	906,612,695
1932.....	106,371,779	18.4	351,686,775	60.8	120,445,350	578,503,904
1933.....	86,466,055	21.3	232,548,055	57.2	87,369,634	406,383,744
1934.....	105,100,764	24.2	238,187,681	54.9	90,510,180	433,798,625
1935.....	111,682,490	21.4	303,639,972	58.1	107,108,691	522,431,153
1936.....	117,874,822	20.9	319,479,594	56.8	125,364,647	562,719,063
1937.....	129,507,885	19.3	393,720,662	58.6	148,647,019	671,875,566

7.—Percentage Proportions of Imports from the United Kingdom and the United States, respectively, to Totals of Dutiable and Free in the fiscal years 1911-37.

NOTE.—For the years 1868 to 1910, see Canada Year Book, 1927-28, p. 499.

Fiscal Year.	United Kingdom.			United States.		
	Dutiable to Total Dutiable.	Free to Total Free.	Dutiable and Free to All Imports.	Dutiable to Total Dutiable.	Free to Total Free.	Dutiable and Free to All Imports.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1911.	29.82	15.05	24.34	54.14	72.05	60.84
1912.	26.69	14.72	22.42	58.72	71.74	73.37
1913.	24.47	13.43	20.71	62.57	69.78	65.03
1914.	24.95	14.26	21.35	60.81	70.16	63.96
1915.	24.31	12.61	19.79	60.27	72.85	65.13
1916.	17.97	11.63	15.24	68.93	78.29	72.95
1917.	16.35	8.24	12.67	71.91	86.59	78.57
1918.	10.70	5.54	8.45	79.61	86.29	82.27
1919.	9.50	5.90	7.97	79.10	84.74	81.50
1920.	13.44	8.93	11.87	72.04	81.26	75.25
1921.	20.07	11.17	17.25	64.19	79.51	69.04
1922.	19.20	8.72	15.66	62.97	80.88	69.02
1923.	21.61	9.49	17.61	61.85	78.66	67.41
1924.	21.32	9.12	17.19	60.20	81.21	67.30
1925.	24.16	9.40	18.96	55.63	79.36	64.00
1926.	22.83	8.89	17.65	57.97	78.94	65.76
1927.	20.44	7.81	15.90	59.52	79.53	66.73
1928.	21.13	8.98	16.76	58.59	76.06	64.87
1929.	18.82	8.91	15.34	63.82	77.40	68.56
1930.	18.14	9.45	15.16	63.88	75.55	67.89
1931.	18.91	12.31	16.49	62.65	67.59	64.46
1932.	20.51	14.04	18.39	59.11	64.23	60.78
1933.	21.71	20.52	21.28	56.07	59.16	57.20
1934.	22.77	26.22	24.22	55.85	53.56	54.88
1935.	19.53	23.89	21.38	60.14	55.38	58.12
1936.	18.07	24.48	20.97	61.25	51.27	56.78
1937.	16.30	22.92	19.27	63.99	51.99	58.60

8.—Average ad valorem Rates of Duty Collected on Dutiable¹ and Total Imports from the United Kingdom, the United States, and All Countries, fiscal years 1868-1937.

Fiscal Year.	U.K.		U.S.		All Countries.		Fiscal Year.	U.K.		U.S.		All Countries.	
	Dutiable Im-ports.	Total Im-ports.	Dutiable Im-ports.	Total Im-ports.	Dutiable Im-ports.	Total Im-ports.		Dutiable Im-ports.	Total Im-ports.	Dutiable Im-ports.	Total Im-ports.	Dutiable Im-ports.	Total Im-ports.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.		p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1868.	2	2	2	2	20.2	13.1	1903.	23.3	16.7	24.9	13.3	27.1	16.5
1869.	16.9	13.5	20.1	7.3	20.2	13.1	1904.	24.1	17.6	25.2	13.6	27.5	16.8
1870.	16.8	13.4	19.5	7.8	20.9	14.1	1905.	24.8	18.5	26.1	13.5	27.8	16.7
1871.	16.4	13.5	16.3	8.4	19.6	14.0	1906.	24.6	18.7	24.8	13.1	27.0	16.4
1872.	16.4	12.7	18.0	7.1	19.1	12.4	1907.	24.3	18.4	24.2	12.8	26.5	16.1
1873.	15.6	10.9	17.7	6.5	18.3	10.4	1908.	24.2	18.3	24.6	13.2	26.7	16.5
1874.	16.5	12.8	17.4	7.1	18.9	11.7	1909.	25.8	19.0	24.9	13.2	27.5	16.7
1875.	18.1	14.8	17.3	7.9	19.6	13.1	1910.	25.1	18.9	24.8	13.5	26.8	16.5
1876.	18.8	15.0	19.2	9.3	21.3	13.9	1911.	24.6	18.9	24.7	13.7	25.9	16.2
1877.	19.4	16.2	18.7	7.9	20.6	13.3	1912.	25.0	19.1	25.0	14.8	26.1	16.8
1878.	20.1	17.3	20.4	9.4	21.4	14.2	1913.	25.1	19.6	24.9	15.8	26.1	17.1
1879.	20.5	18.0	23.2	13.1	23.3	16.4	1914.	25.2	19.5	24.8	15.6	26.1	17.3
1880.	24.0	20.0	23.1	16.0	26.1	20.2	1915.	27.1	20.5	25.1	14.2	27.4	16.8
1881.	24.5	20.5	22.0	15.5	25.8	20.4	1916.	28.4	21.1	25.0	13.5	27.2	15.5
1882.	24.1	19.9	21.5	15.0	25.3	19.5	1917.	24.9	17.6	22.7	11.4	23.8	13.0
1883.	24.3	19.2	21.1	14.8	25.3	19.0	1918.	24.3	17.3	20.5	11.1	21.5	12.1
1884.	24.4	19.1	20.7	14.9	25.2	19.0	1919.	22.3	15.3	20.9	11.6	21.5	12.3
1885.	24.8	19.0	21.2	14.5	26.1	19.2	1920.	22.1	16.2	22.5	14.0	22.5	14.7
1886.	25.7	20.0	22.8	15.8	27.5	20.2	1921.	20.9	16.6	20.3	12.9	20.6	14.1
1887.	26.1	20.8	23.8	16.2	28.7	21.3	1922.	24.8	20.1	23.0	13.9	24.5	16.2
1888.	29.1	22.9	26.2	15.3	31.8	22.0	1923.	24.5	20.1	22.5	13.8	24.9	16.7
1889.	29.3	22.4	25.4	14.7	31.9	21.8	1924.	22.3	18.3	22.3	13.2	22.9	15.1
1890.	28.8	22.1	26.6	15.8	31.0	21.4	1925.	22.1	18.2	23.1	13.0	23.3	15.1
1891.	29.0	21.7	26.0	14.9	31.4	21.0	1926.	21.6	18.4	23.9	13.2	24.7	15.5
1892.	29.4	22.1	26.5	16.1	29.7	17.8	1927.	23.9	19.7	23.1	13.2	24.1	15.4
1893.	29.8	22.3	26.7	14.6	30.3	18.4	1928.	25.6	20.6	23.3	13.5	24.2	15.5
1894.	30.0	22.3	27.0	13.7	30.9	17.8	1929.	25.9	20.6	23.4	14.1	24.4	15.8
1895.	30.1	22.6	26.7	13.7	30.5	17.8	1930.	25.5	20.0	23.3	14.4	24.3	15.9
1896.	30.2	22.4	26.7	14.5	30.0	19.2	1931.	26.9	19.5	24.8	15.2	26.0	16.4
1897.	30.7	21.1	26.7	14.3	30.0	18.7	1932.	29.2	21.9	27.4	17.9	29.3	19.7
1898.	29.5	20.8	26.1	13.3	29.7	17.5	1933.	25.8	16.6	28.1	17.4	30.1	19.0
1899.	26.6	19.8	26.3	13.2	28.8	17.2	1934.	26.2	14.2	28.6	16.8	29.2	16.9
1900.	25.6	18.2	25.0	13.2	27.7	16.7	1935.	26.2	13.8	27.4	16.3	28.1	16.2
1901.	24.7	18.3	24.8	12.4	27.5	16.4	1936.	26.7	12.7	26.3	15.6	26.7	14.7
1902.	24.0	17.2	25.2	13.2	27.3	16.5	1937.	25.8	12.0	23.8	14.3	24.9	13.7

¹ See p. 513, also Table 18, p. 577.

² Not separable by countries.

³ Nine months.

9.—Imports for Home Consumption of Certain Raw Materials Used in Canadian Manufactures, fiscal years 1911-37.

NOTE.—For the years 1902 to 1910, see Canada Year Book, 1926, p. 463.

Fiscal Year.	Sugar, Raw.	Vegetable Oil for Soap Industry.	Crude Cotton-seed Oil.	Raw Rubber (including Balata).	Tobacco, Raw.	Hides and Skins.	Cotton, Raw (including Linters).	Hemp, Dressed or Undressed.	Silk, Raw, etc.
	ton.	gal.	cwt.	cwt.	lb.	\$	cwt.	cwt.	lb.
1911....	271,532	297,338	1	28,035	17,204,271	8,105,330	812,622	81,017	121,748
1912....	281,402	409,861	80,916	44,313	17,203,513	8,903,727	727,939	82,661	112,581
1913....	210,101	439,973	243,872	56,755	22,153,588	13,486,459	774,578	64,990	75,776
1914....	347,168	397,278	265,789	44,504	17,598,449	8,831,010	769,930	55,572	101,669
1915....	335,820	413,819	293,849	65,045	18,595,957	12,842,558	730,325	55,370	94,458
1916....	298,433	618,162	430,013	99,132	20,834,672	12,441,731	969,679	50,914	80,745
1917....	365,772	1,281,233	315,621	107,580	17,702,637	12,873,970	877,634	15,846	138,765
1918....	382,807	2,114,796	480,850	130,956	17,824,947	8,796,966	880,374	45,177	158,648
1919....	359,470	2,393,003	459,685	192,272	25,103,080	5,427,544	1,117,235	72,887	213,441
1920....	540,787	870,289	578,986	244,335	24,345,295	22,654,661	964,715	46,553	298,985
1921....	347,504	1,114,470	417,301	228,062	20,007,411	10,652,787	986,315	47,090	272,508
1922....	432,212	1,351,805	488,683	189,525	20,870,509	5,898,087	953,860	77,833	371,570
1923....	571,728	1,945,464	258,381	253,957	14,548,694	7,947,410	1,252,615	203,844	368,026
1924....	419,710	1,937,543	216,082	288,857	15,941,339	461,581 ²	955,966	340,402	335,495
1925....	419,371	1,733,293	213,201	344,509	13,712,885	502,586 ²	1,008,793	249,032	361,403
1926....	579,272	2,622,651	335,755	469,893	14,943,864	534,089 ²	1,355,738	281,639	529,446
1927....	564,779	3,311,449	297,706	502,312	17,446,774	579,085 ²	1,497,438	123,426	679,923
1928....	447,389	3,611,761	623,148	582,039	18,475,772	678,670 ²	1,462,246	99,503	938,459
1929....	409,585	4,354,829	302,197	777,169	18,726,618	507,773 ²	1,511,270	27,390	1,282,815
1930....	402,871	3,950,590	400,653	733,400	17,113,472	486,442 ²	1,260,699	42,620	1,668,972
1931....	415,090	4,217,484	174,711	595,591	16,580,394	345,439 ²	1,067,222	28,423	1,954,395
1932....	405,607	4,243,234	386,275	552,694	13,075,335	281,316 ²	1,009,023	18,348	2,539,133
1933....	311,365	3,689,995	407,055	410,939	10,199,212	268,355 ²	1,009,073	15,810	2,572,949
1934....	229,330	4,699,056	165,257	511,681	8,129,142	313,482 ²	1,394,536	23,498	2,505,200
1935....	321,025	4,610,785	130,743	636,347	9,414,889	333,013 ²	1,434,408	19,166	2,692,693
1936....	296,358	9,788,338	255,976	569,286	5,772,638	404,708 ²	1,425,413	19,324	3,001,902
1937....	330,108	8,685,469	155,387	625,629	3,006,175	381,128 ²	1,541,306	47,848	2,318,030

Fiscal Year.	Wool, Raw. ³	Noils and Worsted Tops.	Artificial Silk Rovings, Yarns, etc.	Manila, Sisal, Istle, Tampico.	Rags, Waste Paper, and other Waste.	Iron Ore.	Alumina, Bauxite, Cryolite.	Tin in Blocks, Ingots, etc.	Crude Petroleum for Refining. ⁴
	cwt.	\$	lb.	cwt.	cwt.	ton.	cwt.	cwt.	'000 gal.
1911....	64,224	778,320	1	274,493	536,604	1	186,152	35,706	54,311
1912....	71,954	689,304	1	291,976	564,296	1	218,998	41,740	72,231
1913....	92,092	980,432	115,710	346,109	750,003	2,116,933	276,170	51,319	143,338
1914....	72,521	1,072,066	129,982	190,867	716,882	1,972,207	312,259	46,076	177,880
1915....	131,940	1,312,885	128,148	284,620	540,922	1,055,724	261,553	29,402	196,203
1916....	211,407	2,587,949	183,278	384,152	510,472	1,595,995	385,959	32,756	186,753
1917....	145,812	2,988,177	276,873	327,691	780,062	2,318,547	816,509	35,726	135,533
1918....	115,380	4,418,854	160,090	496,904	505,643	2,203,506	1,664,799	38,683	191,376
1919....	158,767	5,314,793	161,206	315,067	570,211	2,227,919	1,916,929	28,044	260,820
1920....	117,717	5,847,787	360,297	456,801	826,593	1,632,011	451,349	44,010	298,541
1921....	92,772	55,331 ²	512,109	457,497	1,142,850	1,950,291	1,198,605	42,727	311,719
1922....	125,867	72,254 ²	570,450	189,071	686,483	656,902	166,695	27,242	391,293
1923....	182,556	91,103 ²	933,791	219,591	870,542	1,044,999	792,210	39,258	397,604
1924....	193,217	86,062 ²	1,239,986	272,462	1,123,282	1,807,223	1,266,799	39,837	418,791
1925....	143,629	58,231 ²	1,684,811	258,804	1,232,567	1,911,586	1,358,148	43,535	440,672
1926....	134,344	61,421 ²	1,689,730	442,561	1,307,473	1,053,593	1,336,538	44,409	470,617
1927....	164,234	78,875 ²	1,516,448	523,074	1,364,897	1,445,504	1,647,244	50,858	596,467
1928....	138,957	81,331 ²	1,563,020	529,541	1,371,469	1,491,234	2,663,166	48,742	799,960
1929....	140,219	86,470 ²	2,240,704	770,936	1,314,494	2,272,130	3,444,911	58,928	865,336
1930....	109,343	62,939 ²	2,132,362	464,378	1,606,931	2,456,919	2,738,777	56,318	1,110,170
1931....	107,449	66,493 ²	2,569,574	487,035	1,254,557	1,428,590	2,221,550	49,727	994,385
1932....	96,245	73,694 ²	1,501,739	469,827	1,363,974	802,163	1,704,029	38,095	1,016,355
1933....	83,557	80,071 ²	958,047	753,350	792,085	66,514	745,455	28,763	845,588
1934....	172,153	119,317 ²	2,082,202	699,657	880,381	205,811	1,241,609	31,322	1,026,711
1935....	120,123	90,903 ²	965,341	424,579	1,132,684	1,060,843	1,856,059	42,283	1,058,729
1936....	192,191	137,474 ²	1,078,504	623,696	1,151,442 ²	1,431,111	2,578,380	45,757	1,166,803
1937....	237,712	134,793 ²	1,410,756	585,808	1,140,861	1,325,195	3,650,911	51,876	1,243,339

¹ None recorded.² Cwt.³ Includes hair of the camel, alpaca, goat, etc.⁴ Prior

to 1917 includes all crude petroleum.

⁵ Revised since the publication of the 1937 Year Book.

VALUES.

[illegible]

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.	United Kingdom.			
		1934.	1935.	1936.	1937.
I. Agricultural and Vegetable Products.					
A. MAINLY FOOD.					
Fruits—					
1	Apples, fresh..... bbl.	3,057,897	1,807,398	2,202,053	1,280,402
	\$	11,368,385	7,201,174	8,456,959	4,662,634
2	Fruits, canned..... lb.	16,886,316	24,082,578	22,726,011	20,333,851
	\$	898,066	1,392,196	1,271,154	1,244,542
	Totals, Fruits ¹ \$	12,706,637	8,909,350	10,452,283	6,279,061
Vegetables—					
3	Potatoes..... bu.	\$	\$	750	Nil
	\$	-	-	225	-
4	Turnips..... bu.	\$	14	\$	\$
	\$	-	15	-	-
5	Canned vegetables..... lb.	14,212,760	15,634,099	31,317,592	37,416,350
	\$	674,183	758,814	1,300,448	1,597,538
6	Pickles and sauces..... \$	1,357,265	1,071,058	1,497,404	1,957,829
	Totals, Vegetables ¹ \$	2,031,538	1,829,935	2,803,197	3,563,209
Grains and Products—					
Grains—					
7	Barley..... bu.	1,398,043	3,344,273	5,179,377	5,213,812
	\$	579,194	1,815,126	2,305,530	2,966,467
8	Oats..... bu.	4,009,382	7,973,704	9,900,380	6,675,305
	\$	1,138,017	2,985,457	3,491,878	2,508,878
9	Rye..... bu.	241,820	111,425	405,235	1,763,042
	\$	107,631	64,881	168,238	977,811
10	Wheat..... bu.	112,787,849	113,357,139	133,095,085	155,360,472
	\$	75,699,056	90,191,151	111,656,432	153,247,606
	Totals, Grains ¹ \$.	77,600,084	95,197,180	117,681,648	159,857,300
11	Bran, shorts and middlings..... cwt.	682,554	352,475	587,828	321,202
	\$	517,894	386,800	548,109	317,144
12	Cereal foods..... \$	2,795,236	3,107,135	3,388,607	3,788,426
13	Malt..... bu.	\$	933	35,275	41,346
	\$	-	988	42,276	45,091
14	Oatmeal and rolled oats..... cwt.	403,733	488,479	482,358	543,454
	\$	1,430,565	2,009,442	2,218,638	2,648,493
15	Wheat flour..... bbl.	2,551,249	2,426,437	2,428,380	2,337,674
	\$	8,781,577	8,724,402	9,577,241	10,661,520
	Totals, Grains and Products ¹ \$	91,275,357	109,611,265	133,746,818	177,692,344
Sugar—					
16	Confectionery..... \$	74,423	77,422	106,968	208,220
17	Maple sugar..... lb.	32,928	30,925	30,179	28,028
	\$	5,070	5,351	4,406	4,198
	Totals, Sugar ¹ \$	83,274	87,302	116,512	220,511
	TOTALS, A. MAINLY FOOD ¹ \$	106,393,193	120,819,904	147,337,462	188,106,862
B. OTHER THAN FOOD.					
Beverages, Alcoholic—					
18	Whisky..... pf. gal.	12,770	18,361	14,021	21,178
	\$	58,691	83,818	70,558	95,916
	Totals, Beverages, Alcoholic ¹ \$	58,931	84,013	72,364	96,706
Rubber—					
19	Belting of rubber..... \$	45,985	64,459	110,744	114,195
20	Canvas shoes, rubber soles..... pair	1,185,352	2,127,922	1,718,202	1,642,082
	\$	592,841	1,111,009	800,607	728,877
21	Boots and shoes, rubber..... pair	1,538,054	1,350,392	1,891,306	3,190,182
	\$	1,458,346	1,265,590	1,712,393	2,761,865
22	Heels and soles..... \$	329,505	374,195	347,574	308,193
23	Motor vehicle tire casings..... \$	72,163	12,550	6,659	173,269
24	Motor vehicle inner tubes..... \$	2,285	1,247	49	9,429
	Totals, Rubber ¹ \$	2,878,563	3,315,602	3,436,653	4,625,107

¹ Totals include other items not specified.² Excluding seed potatoes after Mar. 31, 1936 (see p. 540).

Kingdom, United States, and All Countries, fiscal years 1934-37.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
3,213	4,493	2,834	8,323	3,476,114	2,059,618	2,288,010	1,506,227	1
8,427	10,029	7,923	34,826	12,823,785	8,218,846	8,821,752	5,453,273	
213,092	80,663	118,524	269,157	17,547,577	24,968,437	23,773,441	21,758,571	2
12,321	7,281	8,655	20,228	944,841	1,460,454	1,355,944	1,366,376	
227,446	380,420	251,105	489,937	14,607,881	10,496,002	11,258,853	7,778,559	
1,901,128	625,451	568,386	743,554 ²	2,707,693	1,430,267	1,409,663	1,130,350 ²	3
1,337,304	337,413	303,476	652,506	1,876,331	848,185	863,386	969,467	
1,920,249	1,815,207	2,375,906	2,612,010	1,949,022	1,855,158	2,387,891	2,623,787	4
630,679	396,478	634,991	729,969	658,733	405,191	639,259	784,745	
98,629	1,698,494	1,838,469	54,363	17,099,688	21,101,353	38,162,952	43,175,339	5
3,381	69,465	65,351	13,762	810,295	1,013,494	1,608,385	1,902,141	
813	44,580	408	239	1,433,524	1,178,640	1,601,844	2,061,367	6
2,042,592	894,071	1,042,514	1,404,927	4,911,728	3,591,664	4,860,294	5,809,174	
50	7,902,482	1,806,344	13,342,569	1,569,569	12,001,178	7,319,384	18,749,862	7
15	6,003,364	1,221,567	11,826,336	658,747	8,210,230	3,674,119	14,901,211	
120,905	3,514,848	787,085	226,095	5,707,502	12,873,595	12,739,083	8,142,122	8
44,043	1,334,794	212,645	87,731	1,747,650	4,915,135	4,520,822	3,176,469	
2,545,771	694,503	1,576	1,683,027	2,788,213	737,372	664,242	4,446,739	9
1,405,538	386,567	801	1,152,003	1,513,598	463,420	291,643	2,622,959	
431,449	13,933,191	21,583,831	22,878,726	175,534,255	165,701,983	179,124,180	227,996,513	10
261,505	11,196,828	16,660,253	21,698,808	118,969,445	132,441,685	148,576,975	223,461,009	
1,829,154	18,983,538	18,156,363	35,064,181	123,284,392	146,467,012	157,383,360	244,772,885	
1,829,932	2,599,358	2,613,665	3,933,025	2,598,860	3,013,465	3,240,413	4,326,863	11
1,416,635	2,799,416	2,398,136	4,591,824	2,015,610	3,259,579	2,988,324	5,020,834	
40,906	42,910	66,747	242,846	2,981,706	3,274,009	3,554,774	4,160,890	12
3,280,217	2,751,557	2,440,277	1,883,212	3,572,247	2,872,633	2,604,039	2,016,088	13
2,731,557	2,789,940	2,708,160	2,106,289	3,017,394	2,935,114	2,919,996	2,281,235	
-	4,658	16,505	16,008	463,245	550,733	573,412	626,650	14
-	11,966	32,767	18,743	1,705,451	2,330,784	2,670,864	3,083,738	
3,114	64,562	179,826	105,253	5,619,937	4,956,827	4,858,947	4,771,007	15
13,527	201,479	574,660	342,784	19,729,782	18,386,040	19,382,617	21,587,038	
6,223,536	25,647,214	24,287,603	43,588,573	153,318,519	177,929,662	189,850,047	282,820,331	
4,260	4,961	7,045	8,232	219,322	251,408	305,104	473,123	16
2,251,563	3,133,602	3,965,248	5,958,093	2,295,042	3,176,655	4,022,139	6,031,841	17
363,896	468,489	641,074	865,292	370,443	475,398	649,739	877,079	
444,823	641,461	1,031,801	1,107,292	1,568,353	1,324,583	1,481,776	1,683,217	
8,983,137	27,593,578	26,652,672	46,650,006	174,959,074	193,908,632	207,926,168	298,742,686	
1,659,962	2,134,858	2,915,796	5,214,571	2,543,225	2,201,515	2,991,354	5,286,023	18
11,553,409	13,035,161	15,918,595	21,450,569	16,028,484	13,407,076	16,288,585	21,777,246	
12,076,897	13,187,890	15,943,851	21,546,860	16,586,299	13,547,945	16,355,413	21,913,616	
583	293	20,170	2,642	286,412	495,227	552,921	586,829	19
166	48	46	299	1,966,921	3,118,539	2,435,352	2,132,666	20
161	47	53	369	1,029,381	1,649,255	1,205,284	994,274	
795	17,687	5,775	5,843	2,143,886	2,043,340	2,560,801	3,940,220	21
1,556	35,155	12,256	9,596	2,173,548	2,031,666	2,480,596	3,589,091	
-	-	103	-	370,560	434,884	400,596	370,399	22
6,125	9,788	298,564	45,893	4,002,561	6,325,367	6,666,294	7,091,311	23
213	285	42,392	2,893	304,724	491,130	551,903	621,669	24
95,879	128,966	477,406	210,178	8,968,722	12,425,465	12,901,311	14,513,793	

² None reported.

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.	United Kingdom.			
		1934.	1935.	1936.	1937.
I. Agricultural and Vegetable Products—conc.					
B. OTHER THAN FOOD—concluded.					
Seeds—					
1	Clover seed..... bu.	54,009	9,006	22,933	29,138
	\$	416,078	107,035	221,249	259,418
2	Flaxseed..... bu.	44,547	11,608	17,434	175,653
	\$	60,859	52,940	86,151	314,368
3	Grass seed..... bu.	1,200	925	7,792	1,816
	\$	1,092	1,777	9,790	4,940
4	Potatoes, seed..... bu.	1	1	1	Nil
	\$	—	—	—	—
	Totals, Seeds ² \$	493,396	179,732	340,423	594,583
5	Tobacco leaf..... lb.	8,288,753	9,903,130	8,182,158	8,562,102
	\$	2,083,988	2,710,918	2,531,612	2,653,121
6	Hay and fodder..... \$	436,528	393,926	438,103	822,850
	TOTALS, B. OTHER THAN FOOD ² \$	6,104,653	6,837,742	6,924,513	8,976,705
Totals, Agricultural and Vegetable Products ² \$		112,497,846	127,657,646	154,261,975	197,083,567
II. Animals and Animal Products.					
Animals, Living—					
7	Cattle..... No.	54,448	47,861	2,811	36,453
	\$	3,504,613	3,085,021	190,240	2,767,267
8	Horses..... No.	4	34	222	298
	\$	550	5,900	49,525	47,990
9	Swine..... No.	—	—	5	Nil
	\$	—	—	250	—
	Totals, Animals, Living ² \$	3,509,487	3,117,191	241,456	2,817,208
Fishery Products—					
Fish, Fresh—					
10	Lobsters..... cwt.	1	4	1	Nil
	\$	21	85	23	—
11	Salmon..... cwt.	51,416	44,189	48,453	47,316
	\$	742,595	621,105	670,979	667,219
12	White fish..... cwt.	—	—	—	—
	\$	—	—	—	—
	Totals, Fish, Fresh ² \$	792,041	832,406	917,965	859,819
Fish, Dried, Salted, Smoked, Pickled—					
13	Codfish, dried..... cwt.	783	90	46	250
	\$	3,337	600	425	1,443
	Totals, Fish, Dried, Salted, etc. ¹ \$	50,313	69,465	61,022	49,612
Fish, Preserved—					
14	Lobsters, canned..... cwt.	30,374	27,521	25,131	19,692
	\$	1,167,598	1,232,367	1,253,638	1,059,267
15	Salmon, canned..... cwt.	129,223	142,637	192,223	184,325
	\$	2,601,631	3,265,640	4,190,414	3,395,650
16	Sardines..... cwt.	200	43	Nil	Nil
	\$	1,769	483	—	—
	Totals, Fish, Preserved ² \$	3,771,590	4,500,215	5,445,204	4,455,079
	Totals, Fishery Products ² \$	4,613,944	5,402,086	6,424,191	5,389,876
Furs—					
Furs, Undressed—					
17	Beaver skins..... \$	348,808	370,333	240,177	302,359
18	Fox skins..... \$	5,551,527	6,598,136	6,710,773	6,903,481
19	Marten skins..... \$	172,736	185,471	175,396	213,467
20	Mink skins..... \$	707,858	754,153	506,217	526,841
21	Muskrat skins..... \$	701,055	1,020,602	672,447	962,585
	Totals, Furs, Undressed ² \$	8,564,553	10,005,253	9,259,525	10,159,382
	Totals, Furs ² \$	8,810,882	10,362,789	9,774,694	10,767,906

¹ Included with other potatoes prior to April 1, 1936 (see footnote 2, p. 538).
 other items not specified.

² None reported.

³ Less than 0.5 cwt.

⁴ Totals include

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
347	1,608	952	242,889	117,405	16,753	31,545	295,367	1
2,879	19,559	9,322	1,857,508	905,401	191,028	300,051	2,396,019	2
565,724	41	160	4,156	610,327	11,766	17,740	180,108	3
623,528	167	170	2,759	689,520	53,401	86,650	318,493	4
21,288	77,645	86,399	97,610	27,351	84,768	103,181	101,514	5
17,462	358,931	224,686	187,557	24,482	369,840	252,713	196,508	6
1	1	1	791,270	1	1	1	1,336,167	7
-	-	-	709,934	-	-	-	1,380,620	8
660,738	398,761	245,982	2,790,121	1,650,395	657,234	681,103	4,344,968	9
533	382	3,720	24,681	8,460,639	10,294,600	8,884,737	9,414,023	10
139	98	410	996	2,110,265	2,773,452	2,664,681	2,818,534	11
227,154	1,285,057	815,345	1,678,187	870,316	1,996,923	1,544,629	3,072,489	12
13,329,602	15,554,492	18,010,538	26,953,215	30,845,452	32,324,465	34,935,709	47,707,942	13
22,312,739	43,148,070	44,663,210	73,603,221	205,804,526	226,233,097	242,861,877	346,450,628	14
5,624	31,167	140,526	273,430	64,209	83,430	147,792	315,072	15
339,618	1,757,011	7,019,224	11,010,036	3,965,769	4,979,152	7,360,179	14,000,291	16
5,946	3,490	10,703	15,289	6,175	3,906	11,257	16,028	17
298,646	405,981	1,216,246	1,899,446	333,586	455,004	1,311,191	2,011,696	18
77	158	30,301	76,494	5,993	4,695	34,725	83,456	19
480	3,355	531,763	1,365,785	21,702	24,407	556,982	1,398,361	20
771,818	2,358,492	9,078,806	14,879,807	4,471,870	5,710,296	9,577,305	18,053,751	21
101,317	99,387	99,197	97,782	101,318	99,395	99,198	97,783	22
1,558,211	1,629,333	1,815,551	2,129,553	1,558,232	1,629,481	1,815,612	2,129,563	23
51,922	58,605	61,940	98,071	117,209	112,889	119,697	164,871	24
392,927	486,888	483,000	699,517	1,268,352	1,219,661	1,256,453	1,512,205	25
114,087	112,722	120,357	127,996	114,087	112,722	120,357	127,996	26
1,052,720	1,074,193	1,284,755	1,573,533	1,052,720	1,074,193	1,284,755	1,573,533	27
6,742,282	7,368,480	8,916,554	10,131,354	7,737,482	8,355,079	9,984,674	11,197,210	28
73,991	83,388	75,358	63,603	335,779	358,169	266,411	207,464	29
403,758	487,353	388,894	363,074	1,783,090	2,087,489	1,362,980	1,077,114	30
1,031,808	1,266,859	1,172,006	1,295,982	4,110,530	4,750,960	4,031,658	3,813,814	31
11,613	8,523	5,954	6,277	59,305	52,913	45,519	39,396	32
407,136	453,697	318,662	395,499	2,222,128	2,508,173	2,269,904	2,173,234	33
39,633	323	59,977	19,563	503,037	392,321	513,301	554,694	34
226,853	5,708	235,113	113,422	5,773,403	5,989,887	7,344,642	6,969,946	35
1	Nil	1	4	34,260	52,755	53,429	66,540	36
10	-	4	3	263,560	418,135	450,284	581,388	37
766,253	671,794	747,768	693,692	8,456,921	9,305,374	10,418,916	10,076,578	38
8,558,355	9,321,056	10,860,004	12,281,632	20,323,170	22,425,636	24,459,042	25,275,978	39
470,359	262,737	413,793	492,935	837,707	640,447	662,645	819,023	40
780,685	1,274,950	1,287,022	1,586,680	7,289,002	8,559,455	8,707,437	9,234,142	41
137,800	115,304	207,672	331,834	313,916	303,116	359,639	555,696	42
1,465,397	1,120,480	1,622,049	1,966,952	2,202,562	1,895,932	2,154,509	2,506,195	43
449,879	311,800	663,679	558,894	1,174,684	1,368,245	1,386,059	1,548,562	44
4,402,752	4,097,853	5,623,071	7,363,645	14,030,007	14,897,986	15,738,166	18,444,030	45
4,455,565	4,160,590	5,720,058	7,524,218	14,363,776	15,383,771	16,395,705	19,336,425	46

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.	United Kingdom.				
		1934.	1935.	1936.	1937.	
II. Animals and Animal Products—concluded.						
1	Hair.....	\$	1,634	12,512	5,880	8,187
2	Hides and skins, raw.....	cwt.	10,734	24,295	23,608	25,660
		\$	85,337	171,815	158,823	200,437
3	Leather, unmanufactured.....	\$	2,400,834	2,825,122	3,426,423	5,343,490
4	Leather, manufactured.....	\$	265,271	560,424	592,824	787,961
Meats—						
5	Bacon and hams.....	cwt.	945,597	1,270,529	1,186,509	1,718,258
		\$	12,366,426	19,834,321	19,030,333	27,839,974
6	Beef, fresh.....	cwt.	76,763	121,357	24,420	87,556
		\$	410,066	671,918	157,316	359,287
7	Pork, fresh.....	cwt.	8,233	2,488	5,943	6,972
		\$	86,632	29,786	85,282	95,305
8	Pork, dry salted, pickled.....	cwt.	9,448	6,250	2,403	905
		\$	101,173	85,721	38,310	13,722
9	Poultry.....	lb.	1,428,753	2,831,867	1,582,543	3,509,152
		\$	234,898	530,024	371,708	727,581
	Totals, Meats ¹	\$	14,261,527	22,747,475	21,162,489	31,330,280
Milk and Its Products—						
10	Butter.....	cwt.	37,185	4	71,358	44,330
		\$	665,867	89	1,655,987	1,003,229
11	Cheese.....	cwt.	714,133	572,102	528,781	675,846
		\$	7,710,667	6,065,948	6,001,637	9,334,456
12	Milk, processed.....	cwt.	171,151	190,019	160,615	111,629
		\$	1,127,588	1,379,386	1,295,458	827,184
	Totals, Milk and Its Products ¹	\$	9,504,252	7,445,782	8,953,082	11,164,869
Oils, Fats, Greases and Waxes—						
13	Fish and whale oil.....	gal.	74,166	400,153	592,108	1,506,141
		\$	9,621	60,626	131,832	403,277
14	Lard and compounds.....	cwt.	17,979	28,922	181,797	323,559
		\$	121,961	261,056	2,338,263	3,841,468
15	Tallow.....	cwt.	1,267	430	5	8,154
		\$	4,138	1,565	40	38,779
	Totals, Oils, Fats, Greases and Waxes ¹	\$	149,837	350,397	2,539,908	4,350,339
16	Eggs.....	doz.	1,920,055	1,748,180	912,060	992,850
		\$	397,749	393,169	235,292	261,186
17	Honey.....	lb.	1,853,093	2,203,322	1,542,807	2,415,795
		\$	166,445	206,248	124,350	202,868
18	Sausage casings.....	\$	386,629	662,454	667,054	469,611
19	Tankage.....	cwt.	10,835	33,725	Nil	Nil
		\$	15,732	45,334	—	—
	Totals, Animals and Animal Products ¹	\$	44,707,074	54,567,585	54,592,114	73,350,911
III. Fibres and Textiles.						
20	Cotton.....	\$	276,200	376,741	348,613	551,860
21	Silk and manufactures of, <i>n.o.p.</i>	\$	76,637	76,814	55,729	57,181
22	Silk socks and stockings.....	doz. pr.	26,395	35,000	47,843	49,180
		\$	213,328	258,305	327,304	328,897
Wool—						
23	Wool, raw.....	lb.	2,604,343	3,671,981	3,176,279	1,230,582
		\$	485,085	465,746	503,853	260,483
24	Woollen clothing.....	\$	9,372	12,101	7,277	6,662
	Totals, Wool ¹	\$	495,132	482,348	513,437	268,094
25	Silk, artificial.....	\$	111,620	104,411	130,674	282,320
26	Binder twine.....	cwt.	61,521	65,133	67,737	68,205
		\$	291,655	376,787	392,227	479,598
27	Felt manufactures.....	\$	186,507	150,745	142,791	145,709
28	Rags.....	cwt.	9,184	7,060	6,773	6,300
		\$	71,561	55,677	46,532	43,737
	Totals, Fibres and Textiles ¹	\$	1,949,624	2,219,483	2,330,693	2,508,340

¹ Totals include other items not specified.² Less than 0.5 cwt.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
133,790	215,215	251,894	296,065	293,794	377,679	382,417	504,894	1
312,389	218,877	374,241	364,666	344,076	279,891	417,447	418,282	2
2,328,435	1,347,582	3,077,792	3,472,474	2,590,163	1,805,242	3,454,341	3,988,888	3
435,108	243,616	463,906	532,862	3,289,665	3,514,834	4,312,861	6,335,282	4
76,292	41,317	53,649	111,352	384,829	684,726	823,790	1,197,583	5
7,335	3,291	6,889	25,092	960,178	1,276,051	1,201,012	1,757,048	6
197,409	114,751	213,710	663,823	12,683,273	19,998,575	19,407,285	28,801,291	7
1,691	26,726	42,834	15,285	102,771	179,707	92,573	140,008	8
11,280	281,802	511,056	176,949	626,921	1,197,926	916,415	833,605	9
3,667	5,837	57,177	128,769	14,098	9,908	65,223	139,895	10
48,333	80,366	885,613	1,777,264	161,044	132,022	1,002,572	1,936,265	11
1,801	2	2,461	8,537	35,690	24,050	32,562	52,895	12
26,399	10	49,183	158,662	272,621	198,862	325,527	548,995	13
9,149	40,923	97,913	168,882	1,688,919	3,164,790	2,064,402	4,139,279	14
1,684	7,564	19,782	42,613	285,962	596,365	488,431	884,562	15
386,806	568,146	1,830,811	3,033,299	15,503,994	24,114,755	24,220,802	36,114,497	16
44	50	661	213	44,019	4,466	76,911	51,406	17
1,042	1,171	16,609	5,634	818,996	104,758	1,795,784	1,183,633	18
11,816	6,934	31,208	105,719	749,669	602,130	585,449	807,391	19
157,313	100,867	425,724	1,493,372	8,176,271	6,480,947	6,789,588	11,236,543	20
5,126	7,233	15,356	6,174	234,806	264,302	243,574	199,668	21
102,633	148,323	178,129	112,417	1,853,897	2,277,088	2,215,410	1,946,435	22
297,883	250,401	627,131	1,691,364	10,886,289	8,863,192	10,807,451	14,447,544	23
362,944	773,090	647,203	816,906	447,068	1,703,920	1,679,765	2,345,384	24
161,623	186,571	196,112	280,545	174,011	325,898	424,034	690,991	25
51	1,285	5,558	4,798	22,376	32,942	190,013	331,258	26
381	10,984	52,284	36,807	161,481	298,733	2,426,343	3,913,141	27
2,598	57,425	100,002	114,581	10,744	58,477	100,080	129,098	28
8,508	301,331	655,919	571,591	34,591	305,257	656,679	641,367	29
176,324	527,145	957,084	934,172	391,662	988,752	3,631,980	5,396,160	30
539	60,374	7,173	1,641	2,122,904	2,006,633	1,140,856	1,225,381	31
172	9,050	1,539	486	448,236	455,500	304,789	330,159	32
8,610	6,413	6,369	21,783	2,306,248	2,304,461	1,957,982	2,728,262	33
810	678	693	1,858	187,786	212,538	151,204	224,507	34
274,409	317,882	242,947	444,519	1,046,010	1,220,679	1,070,660	1,104,913	35
226,745	228,131	250,146	304,287	242,044	264,934	250,171	304,339	36
288,264	266,109	346,693	528,730	310,846	316,286	346,748	528,845	37
18,435,329	19,922,848	34,058,519	46,431,986	75,151,480	86,848,144	100,932,110	133,940,776	38
83,382	7,055	5,906	16,025	1,345,459	1,819,350	1,736,169	2,114,101	39
2,220	18,524	112,786	58,689	159,536	184,324	301,326	246,450	40
469	24	306	19	208,972	271,000	331,397	434,085	41
2,766	137	2,039	142	1,404,244	1,772,981	2,118,917	2,698,864	42
7,914,861	753,299	4,676,866	3,629,466	10,903,821	5,019,358	8,723,846	9,104,460	43
1,360,968	150,161	982,172	996,223	1,922,433	689,337	1,645,767	2,307,462	44
23,606	40,160	103,542	211,682	107,847	175,701	306,843	459,299	45
1,431,380	231,973	1,153,446	1,279,131	2,094,259	929,941	2,055,046	2,907,567	46
984	2,335	2,821	3,870	212,874	292,897	589,376	1,020,098	47
68,217	28,916	107,648	81,771	150,317	120,005	186,826	161,583	48
317,186	180,798	623,394	551,052	705,496	710,580	1,077,961	1,115,234	49
4,652	4,879	5,473	7,216	461,226	387,182	336,464	374,456	50
104,599	83,149	169,020	176,195	118,968	102,255	194,937	191,552	51
349,154	309,829	613,982	920,063	455,612	419,090	748,154	1,012,139	52
2,530,968	854,821	2,612,474	3,003,772	7,828,684	7,523,144	10,273,697	12,830,212	53

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.	United Kingdom.			
		1934.	1935.	1936.	1937.
IV. Wood, Wood Products and Paper.					
Wood, Unmanufactured—					
1	Logs and Round Timber—				
	Logs, Douglas fir..... M ft.	Nil	178	20	Nil
	\$	—	1,520	225	—
2	Logs, hardwood..... M ft.	8,143	9,847	6,923	8,265
	\$	243,787	301,219	284,503	293,450
3	Poles, telegraph and telephone..... No.	25	Nil	Nil	Nil
	\$	100	—	—	—
4	Railroad ties..... No.	800	67,506	320,203	171,630
	\$	1,153	36,134	171,624	98,093
	Totals, Logs and Round Timber ¹ ... \$	245,836	342,291	461,922	293,450
5	Laths..... M	2	2	5	45
	\$	—	—	23	125
Planks and Boards—					
6	Birch..... M ft.	46,437	63,436	67,921	59,489
	\$	1,280,097	1,761,029	1,846,250	1,634,443
7	Douglas fir..... M ft.	266,633	333,649	390,946	540,758
	\$	3,962,851	5,295,522	6,268,343	10,013,997
8	Pine..... M ft.	18,421	26,475	32,247	39,072
	\$	699,175	1,025,677	1,296,120	1,576,636
9	Spruce..... M ft.	224,347	297,714	188,852	258,851
	\$	3,584,261	5,402,171	3,505,808	5,257,757
	Totals, Planks and Boards ¹ M ft.	595,647	766,578	712,516	1,011,350
	\$	10,302,495	14,521,798	13,926,422	20,768,318
10	Pulpwood..... cord	21	2,904	Nil	Nil
	\$	116	22,984	—	—
11	Shingles..... squares	3,635	6,416	16,171	17,784
	\$	8,441	13,032	38,243	47,097
12	Shooks.....	148,400	150,391	162,884	205,384
13	Spoolwood..... M ft.	6,947	6,699	7,349	5,480
	\$	307,047	292,655	333,716	235,448
14	Timber, square..... M ft.	40,677	24,013	26,215	30,837
	\$	646,473	451,301	571,980	686,153
	Totals, Wood, Unmanufactured ¹ \$	11,946,193	16,393,243	16,273,650	23,626,490
Wood, Manufactured—					
15	Doors..... \$	385,081	825,603	2,234,800	2,455,098
16	Match splints..... \$	323,525	377,548	318,191	295,845
Wood-pulp—					
17	Chemical..... cwt.	417,055	646,899	699,710	643,764
	\$	1,158,699	1,635,870	1,790,082	1,770,426
18	Mechanical..... cwt.	161,975	62,206	416,208	168,950
	\$	153,315	66,123	426,603	174,484
	Totals, Wood-Pulp ¹ cwt.	579,501	709,123	1,116,427	812,714
	\$	1,313,243	1,702,028	2,217,830	1,944,910
	Totals, Wood, Manufactured ¹ \$	2,374,905	3,470,224	5,296,334	5,232,242
Paper—					
19	Pulp and fibreboard..... cwt.	134,490	174,696	193,923	211,170
	\$	407,178	521,088	598,102	604,099
20	Paper board, <i>n.o.p.</i> \$	838,070	1,920,552	2,375,489	2,048,393
21	Book paper..... cwt.	4,081	11,746	18,143	15,845
	\$	33,175	88,016	132,035	118,530
22	Newsprint paper..... cwt.	2,393,452	1,502,533	2,269,553	2,406,052
	\$	4,300,690	2,374,235	3,424,312	3,714,428
23	Wrapping paper..... cwt.	9,600	5,753	7,660	14,755
	\$	47,604	31,441	36,491	59,232
	Totals, Paper ¹ \$	5,948,280	5,402,143	6,997,774	7,027,436
24	Books and printed matter..... \$	133,823	186,359	205,176	177,897
	Totals, Wood, Wood Products and Paper ¹ \$	20,403,201	25,451,969	28,772,934	36,064,065

¹ Totals include other items not specified.² None reported.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

United States ¹				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
56,803	3,120	43,838	3,936	165,108	197,875	205,815	156,747	1
550,806	39,810	467,639	40,193	1,497,525	1,791,575	2,037,924	2,291,820	2
1,844	3,152	4,253	3,942	11,562	16,346	16,810	20,952	3
26,997	49,870	63,480	63,851	290,783	379,149	424,289	587,222	4
191,662	193,853	200,400	294,209	192,956	194,329	201,013	295,061	5
565,189	528,730	563,508	808,370	569,495	529,835	565,018	812,456	6
394,177	298,295	197,421	286,485	874,586	504,507	966,358	798,329	7
402,098	241,679	135,170	220,527	600,165	420,696	513,820	566,137	8
2,117,289	1,284,508	1,916,444	811,950	3,958,019	3,957,124	4,455,839	4,036,667	9
167,050	150,333	278,075	286,626	172,504	160,564	284,470	290,730	10
412,779	392,882	727,597	1,043,498	425,616	415,058	743,847	1,057,697	11
19,010	8,857	17,507	36,625	65,761	72,785	85,913	96,557	12
611,314	294,198	568,057	1,284,925	1,904,291	2,069,860	2,429,436	2,933,797	13
22,655	3,075	91,589	88,002	486,493	530,158	646,878	813,094	14
394,934	70,031	1,414,427	1,539,209	6,801,454	8,059,056	10,179,725	14,926,583	15
114,766	86,721	80,575	86,568	140,614	121,267	119,207	133,350	16
2,576,017	2,121,972	2,108,997	2,462,992	3,483,967	3,387,914	3,585,504	4,275,559	17
151,491	124,669	166,497	275,793	389,241	450,092	368,540	549,080	18
3,079,038	3,004,298	3,953,726	6,627,444	6,969,184	9,024,183	7,896,565	12,341,036	19
323,090	235,434	404,293	554,245	1,210,769	1,301,301	1,382,714	1,866,811	20
7,150,097	5,912,329	9,448,877	14,165,558	21,258,286	24,900,902	27,605,281	40,284,864	21
693,077	994,158	968,160	1,166,466	693,098	1,003,102	973,738	1,183,361	22
4,883,202	7,054,650	6,901,315	8,544,006	4,883,318	7,131,238	6,943,102	8,679,198	23
1,726,795	1,388,285	2,828,836	2,530,088	1,762,363	1,427,227	2,867,885	2,586,892	24
3,689,405	3,427,462	7,609,429	6,432,913	3,764,418	3,505,425	7,692,957	6,578,972	25
29,998	26,469	1,048	117	697,728	691,442	675,507	735,009	26
874	1,424	3,138	5,132	7,824	8,123	10,897	10,612	27
26,933	47,394	115,242	190,464	334,172	340,049	466,237	425,912	28
602	905	2,968	3,936	129,827	119,163	89,346	104,575	29
14,379	23,067	52,447	65,618	1,716,051	1,707,425	1,477,822	1,797,211	30
19,128,395	19,164,041	27,940,579	33,808,956	38,193,347	44,282,275	52,046,263	67,930,452	31
1,631	728	344	892	401,953	833,607	2,239,547	2,462,391	32
Nil	Nil	Nil	Nil	323,720	377,548	318,191	295,845	33
7,329,889	6,971,856	8,280,235	10,197,666	9,699,586	9,403,860	10,339,190	12,147,032	34
17,112,390	17,206,402	20,053,432	24,838,959	21,791,075	22,567,432	24,547,748	29,222,085	35
2,542,803	2,350,012	2,317,147	2,716,717	2,704,778	2,412,218	2,733,355	2,885,667	36
2,645,845	2,688,689	2,442,829	2,955,709	2,799,160	2,754,842	2,869,432	3,130,193	37
10,345,358	9,746,030	11,210,106	13,626,850	12,906,150	12,249,540	13,722,878	15,792,020	38
20,223,982	20,423,536	23,140,252	28,602,029	25,102,381	25,869,296	28,103,970	33,210,237	39
20,858,753	20,621,899	23,246,887	28,786,375	27,320,883	28,411,698	31,872,820	37,217,274	40
374	540	3,590	18,838	203,178	279,596	307,223	385,261	41
842	1,645	12,446	58,022	640,113	858,215	981,152	1,177,521	42
429,651	361,007	445,609	640,942	1,451,924	2,514,140	3,039,637	2,894,383	43
401	331	336	277	43,903	50,702	61,296	65,833	44
5,807	3,616	3,563	3,167	296,339	351,254	435,014	444,507	45
33,246,052	39,068,685	42,362,075	50,597,101	40,481,134	47,850,462	53,261,626	62,899,709	46
61,180,121	68,106,166	72,956,142	89,166,874	73,238,482	82,147,844	90,761,379	110,176,448	47
14,901	19,465	18,386	17,446	186,701	245,953	251,291	384,777	48
24,487	27,665	27,881	29,178	519,662	690,446	751,887	1,295,775	49
61,871,269	68,649,416	73,683,795	90,641,369	77,040,786	87,569,412	97,094,240	117,818,478	50
298,220	289,438	376,617	480,975	587,382	669,324	818,420	952,272	51
102,156,637	108,724,794	125,247,878	153,717,675	143,142,398	160,932,709	181,831,743	223,918,476	52

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.	United Kingdom.			
		1934.	1935.	1936.	1937.
V. Iron and Its Products.					
1	Pigs, ingots and billets..... ton	9,726	27,231	62,988	91,187
	\$	193,035	636,396	1,353,852	2,222,118
2	Scrap iron or steel..... ton	776	2,195	139	2,857
	\$	6,674	21,289	2,318	25,988
3	Rolling-mill products..... ton	9,622	41,539	46,053	41,293
	\$	267,590	1,253,789	1,376,305	1,298,031
4	Tubes and pipes..... \$	22,213	25,426	34,490	40,205
5	Wire..... \$	95,112	315,841	385,710	470,850
6	Farm implements..... \$	292,816	593,915	774,526	1,086,548
7	Hardware and cutlery..... \$	860,737	1,112,607	1,266,901	1,291,790
	Machinery—				
8	Adding machines..... \$	60,726	114,627	205,313	678,813
9	Electric vacuum cleaners..... \$	307,060	230,885	540,029	103,253
10	Sewing machines..... \$	4,872	4,947	1,766	433
11	Washing machines and wringers..... \$	153,313	349,470	388,163	452,637
12	Typewriters and parts..... \$	11,119	12,965	13,962	502,430
	Totals, Machinery ¹ \$	1,388,039	2,061,513	2,560,694	3,713,677
13	Tools..... \$	223,250	267,835	315,855	394,115
	Vehicles—				
14	Automobiles, freight..... No.	6	4	7	3
	\$	1,921	2,009	2,973	1,506
15	Automobiles, passenger..... No.	2,471	5,277	3,943	2,546
	\$	1,645,380	3,530,912	2,725,993	2,145,036
16	Automobiles, parts of..... \$	21,828	19,646	19,018	8,839
	Totals, Vehicles ¹ \$	1,670,701	3,553,535	2,751,303	2,155,847
	Totals, Iron and Its Products¹.... \$	5,237,085	10,074,340	11,159,695	13,032,283
VI. Non-Ferrous Metals.					
17	Aluminium in bars, blocks, etc..... cwt.	229,022	270,232	330,608	417,592
	\$	4,069,258	4,629,061	5,745,538	8,081,088
18	Brass..... \$	602,141	464,225	363,439	459,662
	Copper—				
19	Copper ore..... cwt.	170,205	28,697	10,884	8,098
	\$	893,781	137,048	58,277	63,141
20	Copper blister..... cwt.	2	2	2	2
	\$	—	—	—	—
21	Copper in ingots, bars, rods, strips, etc.... cwt.	1,275,579	1,963,329	2,034,342	2,568,253
	\$	9,810,054	14,398,141	16,102,177	25,235,656
	Totals, Copper ¹ \$	10,881,661	14,741,154	16,381,403	25,587,108
22	Lead in ore..... cwt.	2	2	29	Nil
	\$	—	—	104	—
23	Lead in pigs, etc..... cwt.	1,722,778	1,832,589	1,877,370	2,069,348
	\$	3,289,246	3,185,588	5,234,242	8,024,985
	Nickel—				
24	Nickel in ore, matte, etc..... cwt.	258,818	379,953	400,898	301,646
	\$	4,657,310	6,838,730	7,218,434	5,429,863
25	Nickel, fine..... cwt.	79,719	61,212	204,364	179,533
	\$	3,827,623	2,748,981	9,064,223	7,717,814
26	Nickel, oxide..... cwt.	1,856	3,193	2,644	2,858
	\$	58,816	110,144	84,605	96,801
	Totals, Nickel..... \$	8,543,749	9,697,855	16,367,262	13,244,478
	Precious Metals—				
27	Gold-bearing quartz, dust, etc..... oz.	2	2	21	261
	\$	380	—	696	8,394
28	Gold bullion, other than monetary..... oz.	1,950,543	486,449	73,924	52,921
	\$	60,981,255	16,702,500	2,599,500	1,876,500
29	Platinum in concentrates..... \$	2,021,750	5,402,955	5,174,200	8,052,314
30	Silver in ore..... oz.	2	2	61,558	3,359
	\$	—	—	32,504	1,525
31	Silver bullion..... oz.	482,352	2,464,911	1,552,802	2,428,324
	\$	211,520	1,138,918	1,035,669	1,099,263
	Totals, Precious Metals ¹ \$	63,500,509	23,498,743	9,239,206	11,348,320

¹ Totals include other items not specified.² None reported.³ Quantity not stated.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
72,859	44,072	55,838	71,793	83,517	71,869	119,881	164,848	1
2,695,148	1,084,899	1,325,181	1,744,250	2,937,512	1,767,267	2,739,748	4,074,851	2
81,505	46,917	88,389	132,567	143,747	89,652	128,371	206,865	3
487,278	371,600	815,811	1,450,263	889,558	742,285	1,163,261	2,189,890	4
4,878	1,633	1,962	1,635	36,182	64,754	78,704	91,526	5
123,541	42,683	56,784	41,077	1,080,697	1,967,381	2,463,441	3,093,006	6
256,109	83,146	92,759	44,183	808,114	886,287	917,938	884,497	7
2,618	670	856	982	386,711	850,834	1,065,028	1,166,356	8
322,519	603,040	2,467,203	1,926,351	1,819,826	3,567,253	6,344,437	6,276,608	9
8,756	55,371	161,763	142,724	1,863,473	1,823,704	2,108,350	2,201,921	10
65	1,777	675	175	63,207	134,573	322,019	781,865	11
1,068	3,487	2,230	3,028	338,367	295,277	669,701	172,297	12
19,112	1,646	3,217	5,738	649,051	1,907,814	1,552,803	1,548,582	13
498	645	588	318	162,616	393,271	541,996	706,577	14
3,659	3,253	1,207	2,147	290,340	389,115	181,323	985,469	15
216,359	213,204	130,472	150,702	2,923,526	5,368,997	5,803,925	7,607,472	16
3,059	8,947	15,592	27,945	584,670	811,122	994,314	1,203,200	17
14	11	13	19	7,041	12,737	17,420	15,155	18
1,710	6,064	3,948	6,498	2,519,838	4,675,901	6,158,129	5,616,387	19
330	357	388	437	21,360	36,083	49,911	38,424	20
84,535	75,437	113,800	148,226	8,934,250	14,516,269	17,727,901	13,809,343	21
23,532	51,050	38,094	59,324	1,444,515	2,642,335	3,224,008	2,902,938	22
116,758	151,097	191,265	241,655	12,932,520	21,904,732	27,208,481	22,460,693	23
4,348,230	2,739,062	5,411,683	6,072,255	26,641,482	40,736,038	52,368,057	53,173,175	24
22,205	36,217	41,989	85,039	347,129	457,653	558,859	680,357	25
362,867	579,434	622,700	1,365,224	6,174,995	7,788,189	9,358,074	12,522,047	26
89,420	57,470	194,978	318,861	1,002,979	920,565	984,323	1,141,648	27
191,579	223,125	255,178	368,831	402,039	331,611	378,973	521,729	28
1,006,094	973,889	1,364,610	2,800,339	2,109,770	1,454,256	2,024,180	3,963,652	29
148,034	454,657	544,845	Nil	148,034	454,657	544,845	Nil	30
1,246,096	3,499,641	4,174,227	1,246,096	3,499,641	4,174,227	4,174,227	3,583,982	31
-	29	36	222	2,013,093	2,553,417	2,986,166	3,583,982	32
-	405	574	2,239	15,254,562	18,750,596	23,697,792	34,873,145	33
2,284,241	4,508,924	5,633,968	3,089,411	19,222,279	24,539,749	31,031,411	40,221,226	34
40,620	19,183	1,146	28,086	135,817	219,939	79,502	103,132	35
161,665	76,726	4,581	123,913	400,809	459,703	231,624	340,609	36
2	2	21	10	2,888,907	2,897,087	2,860,854	3,439,935	37
-	-	111	63	5,501,523	5,089,045	8,055,158	13,438,592	38
89,726	85,831	96,484	111,378	437,394	598,277	661,947	601,905	39
1,618,268	1,543,184	1,737,027	2,004,725	7,878,026	10,766,952	11,907,860	10,835,789	40
140,149	453,501	615,251	842,984	544,189	562,637	908,645	1,131,141	41
10,702,445	10,688,412	15,433,539	21,067,972	17,118,102	16,375,391	28,439,250	33,413,742	42
16,018	7,367	10,251	28,410	84,838	34,111	38,660	57,315	43
340,255	150,102	203,377	578,930	3,202,110	1,280,516	1,297,270	1,632,653	44
12,660,968	12,381,698	17,373,943	23,651,627	28,198,238	28,422,859	41,644,380	45,882,184	45
3	117,645	138,689	185,955	3	117,877	139,686	190,914	46
2,628,966	3,718,241	4,767,713	6,326,990	2,629,346	3,725,211	4,802,029	6,497,281	47
767,138	2,304,303	2,309,548	2,135,278	2,717,681	2,790,752	2,383,472	2,188,199	48
25,629,671	80,023,431	80,815,354	74,790,769	86,610,926	96,725,931	83,414,854	76,667,269	49
2	2	600	Nil	2,110,949	5,522,018	5,286,260	8,185,250	50
3,424,823	1,280,929	1,226,111	2,833,246	3,467,576	1,453,079	1,732,537	3,387,273	51
1,145,062	548,738	771,664	1,263,770	1,161,942	628,071	1,053,213	1,496,431	52
5,669,451	5,081,710	16,871,081	10,145,504	11,373,585	9,553,163	18,458,481	12,800,319	53
2,331,070	2,636,063	10,361,830	4,538,204	4,524,948	4,729,586	11,420,747	5,747,319	54
31,989,242	87,232,749	97,136,587	87,547,822	97,578,188	111,891,463	106,793,429	99,531,903	55

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.	United Kingdom.			
		1934.	1935.	1936.	1937.
VI. Non-Ferrous Metals—concluded.					
1	Zinc— Zinc ore..... cwt.	Nil	68,578	10,580	Nil
	\$	—	117,250	17,500	—
2	Zinc spelter..... cwt.	1,391,620	1,944,907	2,185,952	2,061,828
	\$	4,299,743	5,264,044	6,690,035	6,756,236
	Totals, Zinc ¹ \$	4,315,475	5,394,622	6,724,160	6,766,597
3	Electrical apparatus..... \$	615,592	562,796	620,339	951,395
	Totals, Non-Ferrous Metals¹..... \$	96,816,118	63,100,604	61,821,441	75,819,787
VII. Non-Metallic Minerals.					
Asbestos—					
4	Asbestos, raw..... ton	4,786	4,437	4,792	6,971
	\$	317,537	310,313	292,560	449,251
5	Asbestos sand and waste..... ton	2,686	2,135	3,630	4,576
	\$	51,919	45,985	74,921	86,531
	Totals, Asbestos ¹ \$	427,908	449,871	476,045	634,612
6	Clay and products..... \$	18,916	13,916	4,976	22,861
Coal and Its Products—					
7	Coal..... ton	7,559	24,427	37,948	26,209
	\$	43,104	132,760	224,786	133,576
8	Coke..... ton	Nil	Nil	779	1,090
	\$	—	—	29,080	34,200
9	Tar, pitch, and oils..... \$	101,141	10	Nil	Nil
	Totals, Coal and Its Products ¹ \$	144,245	132,770	253,866	167,776
10	Petroleum and products..... \$	28,683	21,657	53,711	68,094
11	Abrasives, artificial, crude..... cwt.	70,941	89,736	94,023	167,594
	\$	529,527	709,172	752,513	1,038,343
12	Gypsum, crude..... ton	2	31,895	65,024	104,925
	\$	—	33,477	66,764	110,282
	Totals, Non-Metallic Minerals¹..... \$	1,897,685	2,053,754	2,207,869	2,730,516
VIII. Chemicals and Allied Products.					
13	Acids..... \$	934,439	868,208	710,500	1,088,035
14	Cobalt oxide and salts..... \$	262,185	283,112	469,169	561,555
15	Drugs, medicinal..... \$	405,612	444,765	554,819	662,758
Fertilizers—					
16	Ammonium sulphate..... cwt.	33,600	Nil	Nil	Nil
	\$	28,560	—	—	—
17	Cyanamid..... cwt.	Nil	Nil	Nil	56
	\$	—	—	—	90
	Totals, Fertilizers ¹ \$	28,560	Nil	Nil	90
18	Paints and varnishes..... \$	182,501	293,593	323,262	454,538
19	Soap..... \$	512,857	533,648	595,074	814,967
20	Sodium compounds..... \$	28,401	51,436	63,596	93,068
	Totals, Chemicals and Allied Products¹ \$	3,130,678	3,030,908	3,212,081	4,191,193
IX. Miscellaneous Commodities.					
21	Containers (outside coverings)..... \$	7,817	10,454	12,037	15,054
22	Electric energy..... M k.w.h.	Nil	Nil	Nil	Nil
	\$	—	—	—	—
23	Films..... \$	1,048,693	1,382,831	1,868,619	1,514,207
24	Settlers' effects..... \$	438,842	487,470	454,419	510,764
25	Ships..... \$	2	2	2	2,000
26	Stationery, n.o.p..... \$	311,359	475,478	517,879	632,256
	Totals, Miscellaneous Commodities¹..... \$	1,943,355	2,728,948	3,197,996	3,216,036
	Totals, Exports, Canadian Produce¹..... \$	288,582,666	290,885,237	321,556,798	407,996,698

¹ Totals include other items not specified.

‡ None reported.

Kingdom, United States, and All Countries, fiscal years 1934-37—concluded.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
Nil	61	8	3	180,922	353,632	160,468	436,781	1
—	276	30	13	304,720	602,928	288,665	945,303	
560	4,370	11,766	75,029	1,909,926	2,516,290	2,633,771	2,659,489	2
2,156	10,063	36,205	303,636	5,928,446	6,900,018	8,056,628	8,842,991	
5,497	10,339	39,353	304,675	6,284,375	7,545,793	8,418,199	9,863,937	
19,485	28,105	45,067	28,120	2,023,985	2,306,266	2,941,248	3,611,393	3
48,029,226	105,236,847	121,783,549	117,328,297	168,375,134	191,345,386	212,547,372	230,152,314	
55,572	43,991	64,354	83,664	87,767	81,494	109,270	140,804	4
2,658,116	2,040,464	3,321,538	4,346,725	4,432,855	4,021,968	5,865,136	7,602,623	
68,015	69,981	100,785	168,919	74,563	76,649	108,828	180,183	5
939,021	998,168	1,589,583	2,754,216	1,061,147	1,131,540	1,746,708	2,966,679	
3,599,312	3,040,400	4,911,947	7,101,580	5,585,001	5,299,825	7,778,782	10,793,696	
39,718	50,793	72,531	113,004	178,268	200,629	443,578	462,421	6
102,108	119,834	173,009	210,417	239,686	334,721	434,982	418,065	7
358,779	445,105	646,864	783,413	1,093,631	1,527,011	1,970,367	1,780,856	
23,638	40,113	29,815	28,615	24,416	41,903	33,325	33,670	8
314,485	548,901	271,144	237,331	325,061	571,058	350,267	343,695	
235,902	501,656	729,848	636,118	593,938	726,094	805,622	703,000	9
909,775	1,495,887	1,648,197	1,656,862	2,013,239	2,824,388	3,126,597	2,827,551	
1,033,726	316,676	252,804	620,629	1,734,940	1,001,223	986,735	1,585,929	10
784,787	1,186,028	1,340,606	1,651,369	866,997	1,806,215	1,455,723	1,857,674	11
2,239,034	2,970,756	3,295,236	4,410,575	2,821,805	3,781,372	4,121,292	5,569,676	
308,656	315,338	365,267	603,302	308,656	351,277	430,291	708,227	12
367,998	371,745	429,982	710,280	367,998	410,996	496,746	820,562	
9,217,668	9,214,868	11,566,497	17,080,392	14,808,912	15,654,323	19,083,643	26,081,028	
2,189,506	2,143,965	1,806,814	1,898,306	3,190,794	3,063,484	2,585,329	3,078,334	13
100,364	Nil	Nil	14	451,459	366,125	480,633	572,545	14
19,692	22,607	28,185	28,203	671,733	774,843	1,014,485	1,310,276	15
470,030	351,233	285,974	382,283	1,490,575	996,903	1,005,546	1,466,723	16
432,125	395,775	325,176	383,499	1,316,451	1,056,771	1,099,605	1,526,131	
1,384,896	2,016,986	2,209,296	2,722,530	1,409,244	2,165,982	2,275,723	2,833,169	17
1,469,924	2,152,583	2,290,663	2,934,849	1,499,489	2,340,884	2,384,610	3,089,325	
2,517,188	3,227,673	3,218,373	4,459,772	3,474,192	4,179,314	4,282,833	6,088,875	
23,103	29,361	58,375	52,402	436,904	633,734	723,313	911,048	18
162	419,596	391,462	703	645,592	1,115,906	1,152,439	999,349	19
1,439,492	1,150,628	1,484,119	1,642,885	3,314,348	3,375,974	4,019,629	4,221,697	20
6,429,888	7,333,756	7,458,104	8,699,580	13,843,829	15,270,064	16,018,391	19,237,697	
147,711	233,123	296,179	938,907	284,436	440,405	1,126,677	1,663,657	21
1,097,457	1,269,625	1,329,414	1,624,878	1,097,495	1,269,667	1,329,457	1,624,934	22
2,638,444	3,016,221	3,157,905	3,760,966	2,641,110	3,019,154	3,160,817	3,764,831	
755,361	1,110,903	1,414,532	1,417,840	2,713,905	3,026,341	3,768,115	3,432,860	23
2,479,348	2,459,746	2,173,530	2,340,145	3,128,615	3,238,124	2,911,546	3,137,466	24
93,200	110,245	8,235	8,950	232,208	269,845	78,235	164,950	25
16,107	14,551	30,326	20,496	435,070	619,263	716,550	883,782	26
6,612,125	7,516,288	7,500,512	9,077,366	10,357,626	12,083,020	13,113,527	15,397,600	
220,072,810	304,721,354	360,302,426	435,014,544	665,954,071	756,625,925	849,030,417	1,061,181,906	

13.—Principal Imports into Canada for Consumption from United

No.	Item.	United Kingdom.			
		1934.	1935.	1936.	1937.
I. Agricultural and Vegetable Products.					
A. MAINLY FOOD.					
Fresh Fruits—					
1	Bananas.....stem	Nil	Nil	Nil	Nil
2	Grapefruit.....lb.	Nil	25,800	Nil	5,167
3	Grapes.....lb.	22,628	55,630	103,790	43,334
4	Lemons.....box	1,631	3,239	13,057	4,705
5	Oranges.....cu. ft.	6,507	3,123	787	2,110
6	Pears.....lb.	16,325	10,860	3,435	8,397
7	Strawberries.....lb.	6,651	2,813	12,858	65,404
		8,916	6,121	19,033	70,094
		6,700	Nil	12,200	4,500
		431	-	961	125
		Nil	Nil	Nil	Nil
		-	-	-	-
	Totals, Fresh Fruits ¹ \$	28,686	21,337	37,103	83,866
Dried Fruits—					
8	Currants.....lb.	140,228	1,498	50,842	597
9	Dates.....lb.	11,319	275	4,526	66
10	Prunes and dried plums.....lb.	5,333,806	4,069,247	2,387,383	1,249,097
11	Raisins.....lb.	137,885	119,772	67,550	31,898
		20	3,145	4,480	Nil
		2	234	159	-
		1,428,788	990,563	579,291	364,043
		89,297	57,880	35,838	22,611
		-	-	-	-
	Totals, Dried Fruits ¹ \$	292,651	287,398	143,923	110,588
Preserved Fruits—					
12	Peaches, canned.....lb.	Nil	29,368	Nil	150
13	Pineapples, canned.....lb.	-	2,476	-	10
		8,756	Nil	35,100	3,791
		607	-	892	360
	Totals, Preserved Fruits ¹ \$	36,911	58,719	57,268	88,734
14	Fruit juices..... \$	9,493	16,726	9,150	17,186
Nuts—					
15	Coco-nuts..... \$	2	2	2	2
16	Nuts, not shelled.....lb.	1,106,391	1,320,880	1,217,319	778,549
17	Nuts, shelled.....lb.	75,563	70,228	75,690	60,828
		53,161	82,830	50,949	149,071
		13,458	17,622	12,167	27,655
	Totals, Nuts ¹ \$	89,021	87,850	88,560	88,681
Vegetables—					
18	Onions..... \$	13,025	3,249	12,745	3,954
19	Potatoes, sweet..... \$	2	2	2	2
20	Potatoes, <i>n.o.p.</i>cwt.	2	2	2	2
21	Tomatoes, fresh.....lb.	-	-	-	-
22	Other fresh vegetables..... \$	40,780	Nil	60	224
23	Vegetables, canned.....lb.	2,316	-	7	20
24	Pickles and sauces..... \$	185	140	674	1,165
		4,848	3,958	207	2,369
		392	417	117	316
		137,238	148,233	184,668	221,445
	Totals, Vegetables ¹ \$	155,116	154,192	210,898	244,213
Grains and Products—					
25	Biscuits.....lb.	1,373,549	1,439,393	2,361,673	2,102,235
26	Corn.....bu.	156,424	156,544	321,962	318,887
27	Rice.....cwt.	125,397	36	38	217,749
		75,521	50	73	167,160
		1,278	8,337	3,042	1,305
		2,866	20,701	8,791	3,757
	Totals, Grains and Products ¹ \$	468,487	728,857	651,516	680,959

¹ Totals include other items not specified.² None reported.

Kingdom, United States, and All Countries, fiscal years 1934-37.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
420,315	235,235	324,317	325,754	2,474,096	3,223,648	2,967,234	3,392,309	1
775,526	379,508	527,845	553,362	1,522,706	1,687,818	1,767,092	2,002,966	
28,188,019	28,984,183	31,775,950	42,160,118	31,065,691	33,623,930	39,688,217	46,808,118	2
755,322	777,454	853,956	1,105,564	818,903	892,283	1,029,688	1,211,327	
15,636,300	18,401,757	19,088,754	25,699,639	15,973,756	18,724,357	19,420,406	26,137,351	3
554,278	738,646	629,828	937,825	570,064	756,828	653,770	963,392	
149,333	200,348	338,029	288,842	359,867	380,892	371,022	371,520	4
603,029	679,008	1,234,028	1,360,477	1,152,765	1,122,687	1,335,037	1,620,873	
3,654,768	3,744,151	4,260,658	4,501,344	4,149,783	4,561,162	4,904,674	5,197,043	5
4,137,452	4,946,136	5,239,209	6,388,233	4,733,848	6,028,259	5,772,238	6,980,752	
7,481,599	13,432,332	18,012,247	22,812,894	8,178,041	13,656,615	18,092,713	23,166,619	6
262,197	412,213	407,888	553,251	284,436	421,539	411,078	567,050	
5,204,951	5,986,144	4,988,431	4,640,085	5,204,951	5,986,144	4,988,431	4,640,175	7
375,360	416,180	391,012	424,025	375,360	416,180	391,012	424,053	
8,493,824	9,414,881	10,620,591	13,182,435	10,576,033	12,586,403	12,897,652	15,881,865	
Nil	1,500	250	300	3,480,586	5,044,972	5,625,746	4,669,960	8
-	180	32	39	300,216	471,679	521,438	443,648	
715,368	210,394	359,448	544,666	13,690,680	15,819,210	17,189,420	16,853,313	9
40,313	15,196	24,718	30,292	409,559	449,406	458,719	455,653	
16,531,952	17,354,938	19,310,460	17,747,349	16,771,803	17,448,433	19,318,665	17,747,691	10
913,644	935,195	786,951	809,359	930,958	942,745	787,459	809,389	
10,566,647	9,161,365	7,766,269	7,910,677	27,567,507	37,262,634	35,810,480	40,260,540	11
452,330	458,919	381,818	438,920	2,094,238	2,982,586	3,057,640	3,845,146	
1,757,233	1,689,090	1,553,809	1,692,373	4,325,923	5,517,990	5,496,178	6,257,465	
169,179	171,312	272,155	171,828	2,257,641	2,475,427	3,704,195	4,569,722	12
9,006	11,373	16,516	11,404	134,981	157,036	248,159	305,171	
83,886	155,164	195,897	634,210	14,720,631	20,073,368	19,239,113	26,271,885	13
8,452	14,433	17,335	50,584	451,609	638,306	642,196	906,779	
130,228	158,695	201,483	324,844	1,064,439	1,491,067	1,638,972	2,161,156	
45,867	87,875	189,830	339,770	75,173	156,538	266,083	495,779	14
677	394	345	714	133,155	151,479	196,666	213,815	15
2,043,225	1,444,300	1,624,887	2,518,902	32,379,813	44,286,729	39,193,302	41,278,302	16
153,349	122,137	189,967	363,141	1,145,561	1,127,291	1,407,446	1,622,016	
872,524	829,821	1,148,313	1,220,893	7,716,168	8,569,738	9,881,176	9,923,138	17
233,811	243,399	342,099	391,514	1,400,676	1,497,325	1,831,029	1,864,530	
387,842	365,930	532,467	755,730	2,713,675	2,812,416	3,470,937	3,748,241	
88,775	60,788	89,136	120,766	228,410	181,779	272,008	253,265	18
88,546	108,365	110,136	145,198	90,643	110,486	112,750	145,998	19
96,480	113,920	104,703	119,570	108,935	123,363	115,389	122,354	20
143,842	152,697	143,075	289,180	162,463	170,452	161,071	296,850	
9,054,635	11,290,788	6,148,044	16,305,971	26,161,389	30,612,570	32,242,753	40,503,713	21
421,318	345,266	317,018	581,311	800,532	885,391	1,028,059	1,307,265	
1,970,746	2,079,490	2,495,898	3,050,150	2,063,677	2,168,996	2,612,928	3,144,826	22
725,989	550,922	937,911	1,849,033	1,986,882	2,327,218	2,387,284	3,562,950	23
63,804	51,631	76,495	131,056	179,840	217,421	232,591	300,232	
53,200	41,599	51,914	63,478	261,286	270,213	310,784	361,390	24
2,843,206	2,857,690	3,302,454	4,439,492	3,818,476	4,039,296	4,773,138	5,900,976	
333,796	382,511	373,937	313,514	1,788,407	1,915,311	2,807,607	2,482,160	25
48,022	48,485	50,421	49,086	218,453	220,506	381,616	376,681	
3,505,984	3,151,220	292,449	490,134	5,669,371	7,957,211	8,307,618	18,632,448	26
1,886,541	2,208,598	307,611	480,128	2,738,601	4,988,051	4,958,387	10,551,080	
156,479	78,075	161,771	45,708	683,542	641,650	727,399	730,165	27
305,141	177,930	461,770	133,261	1,213,328	1,187,625	1,532,502	1,287,377	
3,047,023	3,256,246	1,613,249	1,810,403	5,499,468	8,455,658	8,375,007	14,209,382	

13.—Principal Imports into Canada for Consumption from United

No.	Item.	United Kingdom.			
		1934.	1935.	1936.	1937.
I.—Agricultural and Vegetable Products—continued.					
A. MAINLY FOOD—concluded.					
	Oils, Vegetable, for Food—				
1	Olive oil..... gal.	651	126	2,578	185
	\$	784	119	775	178
	Totals, Oils, Vegetable, for Food ¹ \$	116,107	122,917	148,632	211,357
	Sugar and Its Products—				
2	Confectionery..... lb.	3,542,958	4,003,898	4,288,757	4,332,113
	\$	446,126	492,598	538,480	533,891
3	Molasses and syrups..... gal.	31,327	28,185	1,139,617	28,613
	\$	24,996	19,979	106,924	16,802
4	Sugar, not above No. 16 D.S..... cwt.	Nil	Nil	Nil	Nil
	\$	—	—	—	—
5	Sugar, for refining, above No. 16 D.S..... cwt.	Nil	Nil	Nil	Nil
	\$	—	—	—	—
6	Sugar, above No. 16 D.S., other, <i>n.o.p.</i> cwt.	476	42	72	169
	\$	1,137	238	386	475
	Totals, Sugar and Its Products ¹ \$	472,259	512,815	645,797	551,248
7	Cocoa and chocolate..... \$	37,211	91,754	201,112	589,108
8	Coffee and chicory..... lb.	1,659,938	1,442,080	1,744,528	2,495,478
	\$	253,433	209,800	220,191	326,879
9	Spices..... \$	321,386	337,672	311,696	283,224
10	Tea..... lb.	12,684,404	91,119,398	10,675,961	11,280,343
	\$	3,144,074	2,489,822	2,714,461	2,998,675
11	Yeast..... lb.	190,926	248,487	304,755	308,821
	\$	21,638	32,036	26,873	22,945
12	Hops..... lb.	241,994	155,310	178,559	150,277
	\$	47,157	51,639	48,400	30,516
13	Liquorice..... lb.	1,093	1,823	1,393	1,255
	\$	304	503	427	294
	TOTALS, A. MAINLY FOOD ¹ \$	5,536,914	5,245,863	5,554,113	6,367,900
B. OTHER THAN FOOD.					
	Beverages, Alcoholic—				
14	Brandy..... pf. gal.	840	99	57	1,016
	\$	16,310	1,668	976	17,084
15	Gin..... pf. gal.	58,607	46,607	66,177	74,591
	\$	1,151,995	912,522	238,056	248,991
16	Rum..... pf. gal.	77,462	84,210	112,890	100,444
	\$	1,466,037	1,594,425	2,199,837	1,968,724
17	Whisky..... pf. gal.	457,929	457,536	603,887	650,882
	\$	9,541,922	9,578,598	3,710,956	3,431,055
18	Wines, non-sparkling and sparkling..... \$	143,419	165,130	168,298	167,718
	Totals, Beverages, Alcoholic ¹ \$	12,516,036	12,434,625	6,476,669	5,987,186
19	Gums and resins..... \$	59,600	62,451	67,712	46,066
20	Oilcake and meal..... cwt.	4,948	12,014	3,223	3,908
	\$	7,204	19,514	4,308	7,295
	Oils, Vegetable, not Food—				
21	Cotton-seed oil, crude..... cwt.	58,024	129,501	248,009	155,387
	\$	245,973	463,316	1,438,251	912,191
22	Oil for soap..... gal.	542,270	273,351	2,102,222	667,842
	\$	228,236	107,263	939,085	395,052
23	Peanut oil, crude..... cwt.	55,302	19,398	264,384	363,874
	\$	275,747	130,962	1,651,959	2,296,392
	Totals, Oils, Vegetable, not Food ¹ \$	1,118,438	1,067,292	4,380,860	4,117,038
24	Plants, shrubs and trees..... \$	37,805	41,459	55,602	32,938
	Rubber and Products—				
25	Rubber, crude..... lb.	105,329	19,579	282,453	986,556
	\$	15,947	6,984	38,819	166,346
26	Recovered, powdered and substitute..... cwt.	2,149	2,749	2,690	1,982
	\$	48,277	64,301	60,622	39,942
27	Tires, pneumatic..... \$	31,022	54,332	30,664	59,294
	Totals, Rubber and Products ¹ \$	447,505	411,302	751,285	625,280

¹ Totals include other items not specified.² None reported.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
8,978 11,720	7,517 10,469	2,048 5,322	3,517 6,892	331,793 381,435	339,416 438,265	390,257 473,498	273,447 393,297	1
46,450	60,293	52,411	36,727	561,691	638,669	717,275	682,650	
219,711 43,460 1,777,317 164,471 Nil — Nil — 19,782 88,252	265,759 46,885 180,287 80,388 Nil — Nil — 42,061 184,799	295,464 59,802 279,838 100,788 Nil — Nil — 42,518 207,864	517,316 105,220 501,285 126,947 Nil — Nil — 52,558 249,645	4,636,706 563,408 12,614,893 2,143,721 4,586,593 7,554,778 2,345,386 4,105,810 49,896 154,360	4,971,289 598,240 9,442,507 2,334,445 6,420,492 10,843,614 2,330,611 3,629,557 51,660 206,223	5,513,832 669,800 13,594,356 2,660,693 5,927,162 10,196,464 3,260,887 5,487,623 44,322 211,561	5,813,405 699,145 14,441,657 2,217,281 6,602,157 11,147,651 3,607,966 6,105,954 53,553 252,002	2
309,737	323,381	384,764	500,546	14,535,640	17,623,398	19,242,458	20,440,887	
366,277 711,838 325,621 82,732 25,251 4,359 1,355,751 239,381 136,651 48,756 1,113,572 141,289	308,921 758,619 316,611 142,062 21,019 4,261 1,392,259 234,413 631,822 192,154 1,183,707 141,437	298,272 1,036,684 413,556 163,335 54,922 6,338 1,127,873 186,124 690,595 155,017 971,593 109,545	1,390,846 936,417 353,291 235,367 15,547 3,625 1,031,193 169,973 325,289 98,711 1,160,027 127,419	1,472,174 33,117,206 3,519,261 705,091 36,192,227 7,389,717 1,548,230 261,679 793,370 335,651 1,147,664 147,955	1,594,487 33,349,420 3,322,952 862,506 30,370,010 7,107,322 1,643,955 267,647 1,481,511 641,846 1,245,865 153,216	1,807,704 36,795,544 3,573,157 845,829 37,148,787 8,153,748 1,476,843 229,138 1,509,175 436,912 1,107,593 129,568	3,701,013 40,978,228 4,005,028 936,718 40,620,874 9,348,409 1,395,146 212,871 1,300,092 392,096 1,174,456 129,883	
18,311,958	19,602,553	19,822,571	25,543,867	57,096,013	67,872,973	72,143,851	88,605,608	
2 — 2 — 2 — 1 4 96	1 15 2 — 2 — 15 215 1,313	34 457 2 — — 9 46 137	Nil — 2 — 4 33 1,183 14,005 6,079	66,808 541,854 77,683 1,289,775 103,884 1,595,560 458,006 9,542,682 963,794	74,447 662,731 52,781 961,723 116,225 1,740,230 458,735 9,596,079 1,091,887	109,841 795,516 70,252 273,100 176,849 2,293,061 604,340 3,719,490 1,007,548	139,060 917,041 77,427 274,935 240,502 2,137,814 652,331 3,448,351 1,009,666	14
112	1,566	1,435	21,145	14,223,899	14,350,828	8,392,380	8,094,533	
1,246,371 107,233 368,246 1,871,821 595,342 25,815 118,539	1,367,343 1,242 5,434 2,628,070 897,791 9,402 30,760	1,339,981 5 50 1,193,697 593,436 22,816 184,747	1,726,489 Nil — 1,904,621 934,587 Nil —	1,573,726 131,132 165,257 614,219 4,984,361 1,616,107 410,780 1,661,939	1,692,344 94,516 130,743 468,750 7,100,083 2,048,848 549,171 2,015,204	1,757,319 209,154 255,976 1,476,823 9,788,338 3,786,356 566,500 3,329,721	2,023,197 220,979 155,387 912,191 8,685,469 3,777,816 652,960 3,888,640	19 20
2,102,439	2,107,340	2,510,019	3,171,876	5,566,620	6,787,237	11,348,208	12,004,219	
116,538	170,002	199,679	228,439	633,141	748,345	844,593	837,588	24
50,529,964 3,854,890 83,196 272,266 113,158	49,347,334 6,143,661 106,069 432,294 148,935	12,211,949 1,559,105 115,810 474,485 137,112	10,002,961 1,859,083 159,322 653,480 139,508	51,148,547 3,921,198 85,406 322,330 147,795	63,618,101 7,958,308 109,178 509,200 208,443	56,915,391 6,736,561 119,201 558,104 181,905	62,546,059 10,310,668 163,229 720,062 220,383	25 26 27
5,046,185	7,800,977	3,397,346	4,181,685	5,895,034	10,438,911	9,400,819	13,284,292	

13.—Principal Imports into Canada for Consumption from United

No.	Item.	United Kingdom.			
		1934.	1935.	1936.	1937.
I. Agricultural and Vegetable Products—concluded.					
B. OTHER THAN FOOD—concluded.					
Seeds—					
1	Flaxseed..... bu.	243	75	454	119
	\$	784	375	1,955	399
2	Grass seed..... lb.	20,191	93,460	69,300	34,154
	\$	2,193	8,123	9,518	3,428
	Totals, Seeds ¹ \$	143,685	269,430	206,173	208,699
Tobacco—					
3	Tobacco, raw..... lb.	4,943	34,399	66,587	67,950
	\$	7,343	91,654	39,622	38,194
4	Tobacco, manufactured..... lb.	99,155	101,320	95,928	104,879
	\$	320,462	329,176	314,232	345,162
	Totals, Tobacco ¹ \$	327,805	420,830	353,854	383,356
5	Broom corn..... \$	Nil	Nil	1,845	Nil
6	Turpentine, spirits of..... gal.	530	499	819	280
	\$	464	512	580	216
	TOTALS, B. OTHER THAN FOOD ¹ \$	14,804,482	14,858,401	12,453,286	11,555,653
	Totals, Agricultural and Vegetable Products¹..... \$	20,341,396	20,104,264	18,007,399	17,923,553
II. Animals and Animal Products.					
7	Animals, living..... \$	46,792	84,820	90,974	169,535
8	Bone, ivory and shell products..... \$	44,798	48,466	63,945	80,116
9	Feathers and quills..... \$	65,674	35,326	26,190	36,064
Fish—					
10	Fish, fresh..... \$	1,353	816	492	683
11	Fish, dried, salted, smoked..... \$	69,156	45,866	68,077	50,871
12	Fish, preserved or canned..... \$	35,341	42,643	48,286	65,934
	Totals, Fish ¹ \$	105,850	89,325	116,855	117,488
Furs—					
13	Furs, undressed..... \$	336,502	528,457	657,700	1,291,863
14	Furs, dressed..... \$	59,387	52,767	48,801	196,443
15	Hatters fur..... \$	48,020	68,648	122,330	130,622
	Totals, Furs ¹ \$	455,516	663,767	845,699	1,631,091
16	Hair and bristles..... \$	11,838	13,749	23,431	37,446
17	Hides and skins, raw..... cwt.	17,768	4,167	7,140	7,399
	\$	146,609	44,663	80,994	85,184
Leather, Unmanufactured—					
18	Glove leather..... \$	12,864	11,991	27,550	35,528
19	Tanned leather..... \$	39,926	56,721	121,992	86,336
20	Waxed or glazed leather..... \$	463,577	413,746	554,511	512,723
	Totals, Leather, Unmanufactured ¹ .. \$	882,598	917,874	1,341,933	1,357,812
Leather, Manufactured—					
21	Boots and shoes..... pair	160,947	125,177	139,288	218,248
	\$	256,843	237,294	260,379	331,486
22	Gloves and mitts..... \$	49,843	58,770	80,656	80,446
23	Harness and saddlery..... \$	44,952	64,788	56,441	64,883
	Totals, Leather, Manufactured ¹ \$	458,066	473,040	529,699	618,956
Meats—					
24	Canned meats..... lb.	86,205	18,282	43,330	557,032
	\$	24,101	10,295	10,824	54,686
25	Pork, in brine..... lb.	Nil	Nil	Nil	Nil
	\$	—	—	—	—
	Totals, Meats ¹ \$	127,247	87,947	219,745	254,707

¹ Totals include other items not specified.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
160	85	141	218	229,900	840,662	797,917	1,145,166	1
348	233	352	557	283,170	935,883	876,505	1,435,637	
3,807,535	2,622,271	837,658	1,968,881	3,953,321	2,852,468	1,109,759	2,260,983	2
224,203	226,015	62,525	136,972	236,791	257,043	111,286	177,563	
466,117	644,790	312,003	388,072	1,149,847	2,286,168	1,780,603	2,441,743	
7,689,377	9,091,147	5,174,460	2,744,710	8,129,142	9,414,889	5,772,638	3,006,175	3
1,915,480	2,153,105	1,555,889	838,172	2,147,001	2,616,637	2,069,117	1,051,510	
52,854	45,811	46,491	57,597	175,545	166,995	160,147	182,103	4
72,629	60,728	61,316	74,529	429,801	430,124	412,172	458,978	
1,988,109	2,213,833	1,617,205	912,701	2,576,802	3,046,761	2,481,289	1,510,488	
291,876	379,676	301,504	258,041	297,590	424,012	333,546	298,880	5
975,377	928,073	930,809	1,177,898	975,922	928,572	931,708	1,178,258	6
477,153	450,788	424,863	477,945	477,750	451,300	425,657	478,237	
12,675,831	15,999,920	11,137,189	12,723,955	33,732,797	41,545,622	38,198,681	42,794,609	
30,987,789	35,602,473	30,959,760	38,267,822	90,828,810	109,418,595	110,342,532	131,400,217	
938,582	795,919	540,394	547,565	1,030,439	931,937	696,998	812,702	7
183,817	137,327	136,761	163,342	328,041	357,247	374,038	386,812	8
32,604	36,972	55,283	72,048	130,480	121,805	128,138	161,460	9
232,283	342,769	298,406	336,557	382,821	570,302	462,813	623,802	10
28,347	31,581	41,970	41,654	225,286	332,565	307,806	293,061	11
165,645	165,676	183,983	207,831	673,192	768,464	955,334	1,164,548	12
426,275	540,026	524,359	586,042	1,281,299	1,671,331	1,725,953	2,081,411	
3,147,925	1,739,385	2,691,503	3,481,891	3,770,095	2,694,578	3,965,185	5,513,902	13
471,371	476,071	690,233	912,439	826,320	947,566	1,096,830	1,672,712	14
52,414	76,888	241,777	220,977	381,467	429,027	886,838	915,329	15
3,707,497	2,334,148	3,674,780	4,706,597	5,046,441	4,135,464	6,022,268	8,208,740	
205,107	332,737	466,095	527,528	225,807	390,357	528,570	711,151	16
117,859	194,101	142,021	165,394	313,482	333,013	404,708	381,128	17
1,126,175	1,613,392	1,541,221	2,105,281	3,159,646	3,086,167	4,519,627	5,253,091	
192,829	312,949	403,847	451,601	207,533	340,490	434,053	488,825	18
32,296	21,314	27,875	23,148	74,122	78,574	150,107	110,600	19
965,497	1,039,571	1,159,201	930,242	1,513,647	1,492,682	1,782,926	1,498,006	20
1,308,349	1,486,330	1,701,539	1,559,896	2,289,195	2,467,457	3,132,509	2,992,888	
89,950	98,008	117,908	134,023	318,887	301,841	316,472	475,300	21
251,451	291,268	348,482	372,912	593,376	612,929	677,162	836,513	
3,342	3,931	6,574	11,174	728,778	799,351	771,546	735,265	22
27,093	38,253	37,479	43,743	74,195	106,933	95,599	110,321	23
479,381	537,098	594,593	643,760	1,726,280	1,851,392	1,898,436	2,052,541	
24,910	77,499	69,889	158,509	6,127,263	10,451,945	12,315,651	12,112,526	24
4,527	10,073	8,537	16,083	359,823	506,033	578,245	601,422	
4,133,175	3,557,691	617,325	2,452,158	4,133,175	3,557,691	617,325	2,452,158	25
225,575	261,983	66,376	242,347	225,575	261,983	66,376	242,347	
336,967	408,030	147,957	349,533	832,644	1,018,298	964,164	1,147,349	

13.—Principal Imports into Canada for Consumption from United

No.	Item.	United Kingdom.			
		1934.	1935.	1936.	1937.
II. Animals and Animal Products—concluded.					
1	Milk and Its Products—				
	Butter..... lb.	1,858,304	539,128	8,032	49,112
	\$	279,701	84,401	1,345	10,082
2	Cheese..... lb.	40,065	43,760	47,353	61,035
	\$	13,277	14,035	15,026	18,883
	Totals, Milk and Its Products ¹ \$	294,582	100,986	21,312	35,175
	Oils, Fats, Greases—				
3	Fish oils..... gal.	4,141	7,376	16,254	51,836
	\$	13,588	28,133	32,288	82,844
4	Grease for soap and leather..... cwt.	5,666	5,137	6,296	7,530
	\$	13,926	15,886	20,915	28,045
5	Lard and compounds..... lb.	15,340	8,871	17,516	6,551
	\$	1,010	409	1,022	444
	Totals, Oils, Fats, Greases ¹ \$	46,609	77,095	120,866	124,775
6	Eggs in the shell..... doz.	96	48	29	296
	\$	206	149	143	712
7	Eggs, <i>n.o.p.</i> \$	1,664	754	402	232
8	Gelatine, edible..... lb.	704,787	876,554	614,734	868,231
	\$	175,708	194,113	132,707	207,248
9	Sausage casings..... \$	84,448	60,734	4	94,040
	Totals, Animals and Animal Products ¹ . \$	3,102,972	3,038,530	3,792,424	5,070,766
III. Fibres and Textiles.					
	Cotton and Its Products—				
10	Cotton, raw..... lb.	14,604	453,261	73,031	138,835
	\$	1,781	68,759	14,131	25,612
11	Cotton linters..... lb.	148,092	Nil	43,644	55,811
	\$	953	—	3,090	1,925
12	Cotton yarn..... lb.	3,596,007	4,605,901	4,707,644	4,741,903
	\$	1,813,997	2,235,729	2,324,179	2,458,341
13	Fabrics, bleached..... lb.	1,425,239	1,352,332	1,397,226	1,427,376
	\$	703,349	705,652	682,013	676,661
14	Fabrics, unbleached..... lb.	2,621,133	2,915,393	2,678,185	2,780,595
	\$	836,967	901,463	810,584	927,044
15	Fabrics, piece dyed..... lb.	2,714,357	3,105,587	3,380,584	3,609,819
	\$	1,431,181	1,646,066	1,750,219	1,829,766
16	Fabrics, yarn dyed..... lb.	446,390	667,341	735,444	865,476
	\$	253,461	357,830	394,902	475,338
17	Fabrics, printed..... lb.	1,806,002	2,033,356	2,012,025	1,980,096
	\$	1,077,276	1,153,768	1,105,865	1,055,251
18	Velveteens and corduroys..... lb.	489,047	482,060	509,388	445,546
	\$	343,181	412,062	461,114	428,285
19	Embroideries..... \$	15,445	30,735	144,114	131,918
20	Handkerchiefs..... \$	330,531	407,433	459,653	415,605
21	Lace..... \$	366,062	456,451	452,555	409,196
22	Wearing apparel..... \$	176,846	210,767	269,294	326,802
	Totals, Cotton and Its Products ¹ \$	8,373,034	10,246,727	10,794,963	11,253,443
	Flax, Hemp and Jute—				
23	Hemp, dressed or undressed..... cwt.	350	224	Nil	Nil
	\$	4,104	711	—	—
24	Flax, hemp and jute yarn..... lb.	4,081,419	4,310,273	4,455,585	4,545,503
	\$	407,226	458,968	514,448	639,516
25	Linen thread..... lb.	273,679	248,172	322,029	256,090
	\$	264,742	231,458	309,784	251,122
26	Fabrics of flax or hemp..... \$	930,528	910,931	1,024,614	1,078,495
27	Fabrics of jute..... yd.	5,750,887	5,509,516	5,180,098	4,231,855
	\$	416,720	451,176	445,882	418,117
28	Handkerchiefs..... \$	426,077	436,430	462,377	478,128
29	Towels..... \$	142,074	197,019	180,398	157,017
	Totals, Flax, Hemp and Jute ¹ \$	3,551,251	3,754,909	4,066,803	4,331,833

¹ Totals include other items not specified.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
6,764	15,976	68,229	57,048	2,602,744	878,586	164,923	112,745	1
1,709	4,731	18,686	17,409	413,949	139,398	39,746	29,368	2
142,631	131,795	151,962	176,472	957,478	967,472	1,292,169	1,346,897	
52,357	39,122	53,713	53,169	271,879	262,189	326,886	331,031	
77,888	65,340	88,748	98,631	713,583	430,690	395,864	407,324	
48,442	46,222	42,996	100,100	253,394	281,155	346,221	449,007	3
30,655	41,312	47,295	158,123	169,145	225,115	259,594	435,965	
242,654	120,272	69,584	46,269	259,284	138,352	111,960	80,615	4
841,486	486,684	483,865	287,517	891,404	549,566	702,583	444,027	
3,424,426	1,590,602	27,716	236,107	3,440,086	1,755,447	728,560	485,761	5
169,372	63,531	3,647	18,254	170,424	70,375	59,275	33,081	
1,106,135	827,352	827,562	564,289	1,395,607	1,202,552	1,493,990	1,214,029	
13,069	21,563	94,564	37,249	23,894	31,363	101,602	51,647	6
7,148	11,602	29,786	18,858	11,109	15,322	32,434	24,499	
9,970	10,805	41,252	69,206	32,918	47,220	50,716	89,377	7
152,989	147,605	182,601	185,642	1,736,878	2,045,266	2,113,026	2,221,834	8
55,189	100,240	89,082	96,511	448,787	523,213	501,285	519,189	
170,544	278,119	189,465	50,873	634,342	1,101,363	1,178,476	915,525	9
10,459,740	9,827,680	10,973,245	12,659,575	19,841,877	19,957,477	24,314,220	27,863,224	
128,289,546	131,650,373	131,352,641	143,748,459	132,456,924	138,025,066	136,555,504	147,836,584	10
13,746,651	17,096,928	16,402,279	19,257,365	14,343,617	18,111,446	17,209,869	19,905,775	
6,802,928	5,083,562	5,604,362	5,689,292	6,996,747	5,290,802	5,849,244	6,194,830	11
245,631	288,157	323,301	331,923	247,777	301,397	338,557	357,352	
1,334,559	301,308	378,235	354,772	4,937,167	4,917,855	5,098,422	5,117,518	12
688,621	174,898	220,619	204,322	2,511,890	2,430,096	2,563,673	2,679,451	
442,508	419,608	410,704	436,183	1,949,365	1,822,349	1,829,750	1,897,520	13
243,441	232,105	217,454	211,537	1,100,611	1,025,520	928,676	118,998	
3,128,123	2,372,573	2,408,621	3,571,267	5,773,148	5,297,703	5,091,807	6,360,392	14
821,102	657,891	582,270	971,099	1,673,368	1,665,676	1,398,396	1,902,333	
593,359	549,979	831,107	1,025,063	4,015,833	4,217,379	5,044,944	5,043,255	15
390,283	420,612	534,197	645,983	2,183,044	2,380,295	2,662,660	2,910,018	
142,106	113,264	232,533	296,698	746,931	897,596	1,240,762	1,593,738	16
79,175	73,251	131,999	180,461	415,774	494,136	659,030	842,030	
416,128	387,030	394,840	565,161	2,332,401	2,517,800	2,528,904	2,672,659	17
404,833	360,726	311,266	424,847	1,576,135	1,586,190	1,488,849	1,549,964	
49,559	25,927	33,476	47,241	576,057	528,928	594,661	716,305	18
35,303	26,183	33,476	45,552	405,174	454,599	527,277	584,804	
6,615	4,518	17,563	59,431	77,536	83,498	242,464	231,060	19
2,374	2,535	8,951	15,738	477,262	513,180	599,435	609,771	20
22,418	22,616	24,567	22,656	631,303	635,107	545,571	519,193	21
176,823	198,521	242,694	391,050	975,905	1,121,838	1,213,638	1,341,304	22
17,538,117	20,415,256	19,986,613	23,935,467	28,609,485	33,514,397	33,572,292	38,087,820	
4,304	2,985	2,404	1,876	23,498	19,166	19,324	47,848	23
23,378	29,631	34,084	17,141	82,457	76,966	102,585	348,682	
52,122	80,541	90,888	234,845	4,270,001	4,484,477	4,692,048	4,986,469	24
11,556	17,618	18,272	43,617	442,788	493,963	554,673	705,223	
1,884	2,207	932	1,476	276,061	250,455	323,145	261,280	25
2,285	2,625	1,127	1,956	267,525	234,164	311,231	253,803	
5,275	13,183	15,521	23,574	949,326	936,033	1,047,646	1,107,322	26
445,609	346,670	477,808	332,291	72,331,707	75,518,443	80,514,104	99,591,079	27
23,927	17,239	21,743	16,464	3,084,921	3,255,833	3,297,923	3,611,946	
872	2,440	2,188	2,282	513,210	514,939	582,990	613,201	28
1,658	1,130	950	4,639	169,499	211,643	192,704	199,243	29
427,222	516,838	510,733	674,244	7,310,070	7,811,445	8,423,237	9,526,053	

13.—Principal Imports into Canada for Consumption from United

No.	Item.	United Kingdom.			
		1934.	1935.	1936.	1937.
III. Fibres and Textiles—concluded.					
1	Silk and Its Products— Silk, raw..... lb.	Nil	Nil	Nil	Nil
	\$	—	—	—	—
2	Velvets and plushes..... \$	16,043	20,889	34,847	24,325
3	Other silk fabrics..... \$	15,612	78,406	99,430	137,982
4	Wearing apparel..... \$	84,267	108,777	134,514	154,243
	Totals, Silk and Its Products ¹ \$	278,639	328,963	416,080	513,988
5	Wool and Its Products— Wool, raw..... lb.	7,816,531	4,824,587	6,617,868	6,582,608
	\$	1,903,520	1,139,922	1,624,398	1,990,866
6	Noils..... lb.	942,606	580,854	701,616	701,923
	\$	346,114	265,684	305,535	392,157
7	Worsted tops..... lb.	9,143,174	7,269,135	10,290,698	10,515,116
	\$	4,050,468	3,168,297	4,585,797	5,518,984
8	Woollen yarn..... lb.	4,334,871	2,936,672	3,363,525	3,423,436
	\$	3,212,535	2,317,695	2,587,173	2,840,345
9	Carpets and rugs..... \$	155,321	184,245	200,812	287,785
10	Dress goods to be dyed..... lb.	1,114,752	1,304,232	1,330,830	1,334,920
	\$	1,157,938	1,375,542	1,363,558	1,437,263
11	Overcoatings..... lb.	94,074	171,730	812,028	1,180,008
	\$	85,696	160,278	710,011	1,055,450
12	Tweeds..... lb.	972,272	1,300,831	1,366,002	1,436,403
	\$	901,528	1,194,655	1,227,214	1,339,839
13	Worsted and serges..... lb.	2,055,963	2,321,271	3,403,409	4,087,034
	\$	2,542,081	2,985,839	3,942,599	4,814,633
14	Blankets..... lb.	160,680	396,463	548,381	790,653
	\$	74,324	185,379	250,127	411,740
15	Socks and stockings..... doz. pr.	87,233	84,839	91,520	109,644
	\$	340,516	340,617	357,127	439,031
16	Other wearing apparel..... \$	642,217	791,827	900,707	1,081,521
	Totals, Wool and Its Products ¹ \$	18,084,105	16,875,396	19,785,339	23,184,795
17	Silk, Artificial— Silk yarn, artificial..... lb.	365,868	411,465	445,949	996,624
	\$	314,442	317,744	337,469	685,395
18	Fabrics, artificial silk..... \$	1,035,973	809,469	469,951	980,955
	Totals, Artificial Silk ¹ \$	1,411,276	1,204,626	892,689	1,770,466
19	Fibre, manila..... cwt.	Nil	664	Nil	Nil
	\$	—	1,375	—	—
20	Fibre, sisal, istle, etc..... cwt.	9,208	14,665	3,595	1,336
	\$	36,139	47,271	14,084	8,706
21	Binder twine..... cwt.	72,536	79,241	90,080	111,355
	\$	476,881	534,084	567,701	921,127
22	Fishing lines..... \$	809,713	962,024	1,004,407	1,158,354
23	Gloves..... \$	100,874	135,507	179,616	152,576
24	Hats and caps..... \$	220,274	180,987	220,512	270,871
25	Oilcloth..... lb.	824,351	1,688,581	2,367,755	3,010,520
	\$	94,810	165,975	216,713	278,356
26	Rags and waste..... cwt.	44,251	38,923	54,584	62,900
	\$	123,745	195,136	344,682	485,486
27	Surgical dressings..... \$	176,078	138,424	230,386	187,463
	Totals, Fibres and Textiles ¹ \$	35,123,319	36,537,696	40,594,719	46,633,288
IV. Wood, Wood Products and Paper.					
28	Wood, Unmanufactured— Logs..... M ft.	Nil	Nil	Nil	Nil
	\$	—	—	—	—
29	Railroad ties..... No.	Nil	Nil	Nil	Nil
	\$	—	—	—	—
30	Lumber..... M ft.	7	15	8	24
	\$	1,550	3,017	2,191	3,331
31	Veneers..... \$	3,656	6,276	5,862	5,374
	Totals, Wood, Unmanufactured ¹ \$	16,026	10,264	9,783	10,531

¹ Totals include other items not specified.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
2,411,960	2,586,181	2,878,284	2,191,196	2,505,200	2,692,693	3,001,902	2,318,030	1
4,327,621	3,655,014	4,904,668	4,062,250	4,534,182	3,837,406	5,115,544	4,295,726	2
27,129	292,949	298,921	271,266	664,161	646,731	577,332	465,319	3
144,065	359,642	365,168	464,520	762,640	1,235,524	1,237,443	1,281,543	4
522,136	521,641	371,984	419,163	778,095	810,927	649,718	732,095	
5,371,147	4,990,911	6,123,129	5,395,986	7,585,217	6,915,313	8,066,547	7,311,657	
2,011	1,042	3,274	3,336	17,215,256	12,012,265	19,219,073	23,771,236	5
701	869	2,306	1,839	3,747,155	2,765,921	3,969,519	6,476,705	6
Nil	215	Nil	438	1,211,721	630,471	780,671	999,193	7
-	114	-	233	406,158	278,665	326,624	485,704	8
Nil	1,012	873	6,615	10,719,961	8,459,877	12,966,686	12,480,068	9
-	704	777	6,267	4,849,598	3,845,299	5,844,162	6,616,297	10
12,371	4,614	4,533	8,817	4,370,779	2,956,781	3,580,525	3,449,483	11
15,021	7,784	7,927	13,699	3,273,695	2,368,962	2,637,026	2,899,099	12
12,171	11,064	21,681	57,106	481,212	575,072	557,486	709,740	13
Nil	Nil	Nil	Nil	1,168,932	1,329,555	1,343,716	1,339,889	14
509	245	380	488	1,203,979	1,401,720	1,376,227	1,443,330	15
904	588	647	750	99,804	180,243	830,557	1,188,439	16
1,100	1,719	739	186	97,038	183,757	733,315	1,073,369	17
2,374	4,252	1,835	599	984,215	1,311,757	1,383,125	1,440,600	18
5,976	2,992	3,267	3,647	921,627	1,214,775	1,254,583	1,348,461	19
16,100	8,473	8,544	10,318	2,118,048	2,356,906	3,441,185	4,129,775	20
2,214	2,072	2,147	2,182	2,644,730	3,060,219	4,027,717	4,902,746	21
2,263	2,446	2,931	2,006	163,266	398,926	551,002	793,699	22
57	89	193	259	76,916	188,064	253,543	414,495	23
343	499	794	1,060	88,860	65,911	92,749	110,871	24
103,107	99,580	119,397	141,329	349,705	348,323	364,090	445,230	25
				818,095	968,625	1,101,207	1,303,831	26
259,064	261,075	270,674	381,279	21,920,847	20,301,393	24,460,824	30,152,054	27
23,712	128,868	300,550	127,738	2,082,202	965,341	1,078,504	1,410,756	28
32,680	108,841	195,671	112,051	1,323,782	662,553	670,349	919,844	29
191,785	200,302	247,714	369,445	1,402,674	1,171,302	863,328	1,670,480	30
302,854	419,979	659,127	870,219	3,003,250	2,141,239	1,945,377	3,186,546	31
75,835	48,977	10,718	2,315	126,119	134,334	99,525	33,823	32
268,998	187,025	38,509	14,039	440,248	464,907	467,341	214,422	33
373,090	152,740	226,329	251,211	573,538	290,245	524,171	551,985	34
1,301,563	518,714	765,502	1,243,910	1,938,887	972,958	1,950,718	2,885,450	35
14	400	8,632	506	201,470	196,904	266,363	266,692	36
80	2,950	59,389	3,947	1,163,819	1,244,504	1,654,697	2,019,374	37
283,141	274,315	274,148	297,378	1,188,091	1,369,252	1,379,865	1,562,467	38
2,280	4,338	7,860	14,597	191,986	280,402	460,313	527,426	39
217,097	212,244	194,176	237,564	665,187	560,738	515,015	595,671	40
64,546	79,083	347,963	1,497,435	890,784	1,768,278	2,716,354	4,511,565	41
17,972	20,211	60,368	200,927	113,365	186,433	277,270	479,418	42
220,518	282,416	317,798	366,282	313,159	372,882	442,112	523,558	43
1,034,682	1,133,652	1,344,854	1,712,602	1,885,510	1,592,444	2,041,364	2,814,478	44
55,531	31,907	34,823	36,792	233,371	173,120	268,518	227,400	45
28,553,731	30,562,261	32,094,435	37,176,542	79,372,470	81,798,280	89,814,164	104,811,304	46
25,762	28,615	8,973	4,861	25,762	29,143	9,075	4,865	47
379,408	385,792	158,581	88,425	379,408	389,274	160,796	88,571	48
85,540	160,948	187,064	188,521	85,540	160,948	187,064	188,521	49
128,470	211,051	251,294	256,368	128,470	211,051	251,294	256,368	50
48,510	57,705	73,153	100,208	48,510	58,370	73,630	100,661	51
2,051,059	2,376,311	2,865,014	3,964,469	2,071,345	2,407,248	2,897,853	3,995,014	52
231,484	281,707	512,844	512,670	273,425	323,796	546,166	563,230	53
3,086,108	3,701,915	4,169,457	5,204,280	3,172,625	3,829,144	4,307,124	5,408,587	54

13.—Principal Imports into Canada for Consumption from United

No.	Item.	United Kingdom.			
		1934.	1935.	1936.	1937.
IV. Wood, Wood Products and Paper—concl.					
	Wood, Manufactured—				
1	Cork manufactures..... \$	61,864	59,748	64,823	72,220
2	Furniture..... \$	75,504	99,180	104,085	140,713
3	Staves..... \$	122	Nil	Nil	Nil
4	Wood-pulp..... cwt.	Nil	Nil	200	Nil
	\$	—	—	809	—
	Totals, Wood, Manufactured ¹ \$	215,885	235,417	247,255	288,206
Paper—					
5	Boxes and containers..... \$	22,761	26,544	31,136	45,081
6	Paper board..... lb.	458,160	394,925	601,511	526,596
	\$	29,782	30,838	46,589	53,334
7	Printing paper..... lb.	2,417,376	1,945,134	2,049,729	1,924,999
	\$	177,379	148,777	153,961	145,921
8	Wrapping paper..... lb.	971,711	455,582	547,809	443,692
	\$	45,770	26,301	33,009	23,090
	Totals, Paper ¹ \$	1,067,682	1,010,268	1,101,114	1,208,352
Books and Printed Matter—					
9	Advertising pamphlets, etc..... lb.	429,716	365,795	384,537	446,526
	\$	191,538	140,476	160,995	160,200
10	Bibles, prayer books, etc..... \$	108,925	115,759	121,527	106,678
11	Newspapers and magazines..... \$	198,889	254,397	340,083	394,465
12	Photographs, chromos, etc..... \$	37,238	49,526	55,556	65,373
13	Text books..... \$	388,416	404,685	408,839	468,430
	Totals, Books and Printed Matter ¹ .. \$	1,944,312	1,995,836	2,155,244	2,254,729
	Totals, Wood, Wood Products and Paper ¹ \$	3,243,905	3,251,785	3,513,396	3,761,818
V. Iron and Its Products.					
14	Iron ore..... ton	Nil	33	288	Nil
	\$	—	424	3,837	—
15	Pigs, ingots, etc..... cwt.	60,953	142,316	106,422	182,801
	\$	77,169	152,154	115,129	236,497
16	Scrap iron or steel..... ton	5	32	15	3
	\$	75	80	41	15
17	Castings and forgings..... \$	225,185	421,706	512,606	502,614
Rolling-mill Products—					
18	Band and hoop..... cwt.	42,025	34,467	43,703	43,588
	\$	178,553	208,511	251,189	343,727
19	Bars, including rails..... cwt.	90,292	84,675	91,697	104,296
	\$	389,332	529,097	585,755	719,366
Plates and Sheets—					
20	Plates..... cwt.	110,015	100,826	157,302	194,867
	\$	230,046	204,278	326,961	421,950
21	Sheets, galvanized..... cwt.	62,915	101,320	163,553	175,348
	\$	202,054	325,828	530,183	586,059
22	Sheets for galvanizing..... cwt.	263,705	240,380	130,955	175,547
	\$	593,381	596,088	319,528	496,253
23	Sheets for tinning..... cwt.	38,910	178,190	204,401	219,060
	\$	117,898	538,163	602,033	644,396
24	Sheets, other..... cwt.	254,771	293,528	476,989	340,533
	\$	674,231	814,402	1,285,702	977,970
25	Skelp..... cwt.	16,402	10,941	21,918	21,316
	\$	43,602	23,074	47,228	41,830
26	Tin plate..... cwt.	1,663,436	1,594,349	1,537,085	1,642,049
	\$	7,347,131	7,350,346	7,511,760	8,001,612
	Totals, Plates and Sheets ¹ cwt.	2,410,154	2,519,534	2,692,203	2,768,720
	\$	9,208,343	9,852,179	10,623,395	11,170,070
27	Structural iron and steel..... ton	6,190	8,810	14,234	6,152
	\$	217,858	310,094	502,149	247,743
	Totals, Rolling-Mill Products ¹ \$	9,999,037	10,899,881	11,962,488	12,480,906

¹ Totals include other items not specified.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
178,255	168,378	192,007	286,687	407,285	468,477	456,646	650,013	1
272,303	299,924	364,021	746,446	435,482	487,969	564,988	971,243	2
520,544	201,332	200,222	223,338	520,666	201,332	200,222	223,338	3
75,713	226,506	314,561	403,264	75,713	226,730	325,737	403,522	4
115,710	359,554	510,459	650,385	115,710	361,574	529,926	651,070	
1,994,217	2,050,518	2,394,086	3,296,132	2,570,567	2,736,176	3,092,684	4,128,282	
284,421	252,818	222,312	377,071	321,663	292,890	265,142	437,366	5
9,828,236	10,917,078	13,476,995	16,881,417	10,500,020	11,630,383	14,753,408	18,336,454	6
392,990	421,939	503,254	756,658	431,658	468,380	635,130	843,300	
5,916,182	4,241,286	4,676,617	4,505,664	9,211,787	7,178,007	7,957,532	7,958,828	7
407,266	398,904	434,276	489,678	657,540	634,855	680,612	745,919	
3,189,048	3,724,951	2,931,551	2,423,378	5,020,117	5,031,587	4,199,465	4,073,765	8
302,789	293,382	265,596	259,126	393,227	358,364	335,291	347,620	
3,456,692	3,699,850	4,015,053	4,955,607	5,242,168	5,600,024	5,989,251	7,060,499	
1,577,728	2,104,678	2,298,716	3,113,735	2,065,936	2,529,310	2,743,154	3,625,522	9
649,217	826,171	942,706	1,323,319	869,556	995,239	1,130,453	1,511,322	
122,443	108,927	135,160	131,889	329,560	338,311	365,260	362,783	10
2,469,629	2,539,724	2,927,171	4,507,233	2,675,982	2,803,524	3,275,745	4,910,045	11
193,341	206,941	249,964	284,144	243,636	267,952	321,304	365,431	12
462,469	455,576	478,969	576,309	944,508	954,198	977,527	1,128,442	13
6,010,010	6,593,535	7,284,803	9,604,884	8,372,627	9,034,343	9,882,572	12,330,352	
14,547,027	16,045,818	17,863,399	23,060,903	19,357,987	21,199,687	23,271,631	28,927,720	
176,369	686,857	764,262	751,182	205,811	1,060,843	1,431,111	1,325,195	14
344,682	1,260,915	1,572,932	1,584,701	402,034	1,975,532	2,829,987	2,638,731	
118,197	355,341	238,019	136,940	194,116	506,382	395,394	323,963	15
298,935	674,622	474,392	411,028	445,326	857,459	661,854	662,695	
52,427	60,558	101,051	70,062	52,576	87,453	101,997	72,670	16
359,690	435,984	600,822	613,129	360,442	470,444	607,406	629,739	
1,215,591	1,824,155	1,818,245	1,557,108	1,443,221	2,257,587	2,331,413	2,065,465	17
253,915	377,450	538,495	691,539	314,663	429,593	603,394	759,575	18
887,031	1,396,536	1,913,035	2,492,736	1,175,442	1,712,246	2,283,478	2,969,961	
361,201	629,465	548,595	801,335	503,951	773,189	737,996	1,025,690	19
947,922	1,578,975	1,487,210	2,092,837	1,488,562	2,319,202	2,358,703	3,211,601	
74,412	138,947	187,632	328,079	194,492	260,295	360,910	537,815	20
163,717	304,330	422,781	760,650	409,254	544,160	774,994	1,209,709	
34,018	34,700	87,032	74,713	103,030	137,290	258,504	278,976	21
119,365	135,864	333,014	305,255	338,762	466,310	883,923	969,651	
6,660	23,575	5,767	334	270,365	263,955	136,722	175,881	22
14,719	52,678	13,901	1,970	608,100	648,766	333,429	498,223	
13,427	35,550	13,115	1,077	57,337	213,740	217,516	220,137	23
66,058	135,888	45,864	3,674	183,956	674,051	647,887	648,070	
619,896	906,877	1,261,847	1,616,725	905,159	1,227,068	1,785,689	2,015,705	24
1,697,910	2,664,776	3,633,281	4,785,758	2,430,957	3,567,175	5,017,865	5,886,662	
612,634	1,270,477	1,450,979	1,669,658	992,542	1,372,652	1,735,994	1,971,208	25
1,051,717	2,298,927	2,590,297	3,089,089	1,523,062	2,431,917	2,955,046	3,452,541	
56,637	55,543	64,220	399,027	1,721,472	1,649,952	1,603,517	2,042,112	26
262,824	280,309	313,755	1,974,405	7,614,023	7,631,123	7,840,011	9,980,990	
1,422,684	2,465,669	3,070,592	4,089,613	4,244,397	5,124,952	6,098,852	7,241,834	
3,376,310	5,902,765	7,352,883	10,920,801	13,108,114	15,963,502	18,453,155	22,645,846	
11,363	24,588	26,519	48,408	19,913	35,600	44,466	59,727	27
438,239	1,003,741	1,075,319	2,055,484	733,333	1,379,388	1,674,505	2,441,041	
5,670,922	9,917,874	11,851,580	17,597,625	16,533,843	21,412,574	24,805,933	31,351,446	

13.—Principal Imports into Canada for Consumption from United

No.	Item.	United Kingdom.				
		1934.	1935.	1936.	1937.	
V. Iron and Its Products—concluded.						
Tubes and Pipes—						
1	Boiler tubes.....	\$	135,741	170,191	183,113	171,047
2	Seamless tubing, 5c. per lb. and over.....	\$	53,319	83,007	111,211	148,494
3	Wrought or seamless tubing.....	\$	81,128	47,221	61,679	289,949
4	Fittings for pipe.....	\$	1,799	533	251	961
Totals, Tubes and Pipes ¹		\$	293,575	310,584	362,708	617,087
5	Wire.....	\$	652,972	982,810	1,057,495	1,308,138
6	Chains.....	\$	63,065	106,324	120,056	134,608
Engines and Boilers—						
7	Automobile engines.....	No.	43	109	5	22
		\$	17,815	36,053	5,489	14,067
8	Marine engines.....	No.	4	16	9	4
		\$	3,227	42,571	5,875	3,821
9	Engines, diesel and parts.....	No.	102	166	424	422
		\$	186,242	302,982	566,714	734,359
10	Other internal combustion engines.....	No.	82	428	485	745
		\$	42,873	51,403	23,549	27,319
Totals, Engines and Boilers ¹		\$	304,476	501,192	759,976	1,005,447
Farm Implements—						
11	Traction engines (farm).....	No.	1	3	23	94
		\$	1,384	3,199	12,271	47,407
12	Traction engine parts.....	\$	10,578	26,561	15,632	27,133
Totals, Farm Implements ¹		\$	131,992	148,807	214,607	263,160
Hardware and Cutlery—						
13	Cutlery.....	\$	571,250	503,212	591,724	596,043
14	Needles and pins.....	\$	232,645	242,208	269,369	279,140
15	Nuts and washers.....	\$	12,979	13,082	7,949	11,675
Totals, Hardware and Cutlery ¹		\$	856,619	811,709	926,544	938,615
Machinery—						
16	Adding machines.....	\$	1,569	239	34	Nil
17	Air-compressing machinery.....	\$	23,359	55,026	66,914	57,138
18	Cranes and derricks.....	\$	7,336	3,264	5,805	45,728
19	Logging equipment.....	\$	1,499	1,222	181	2,630
20	Metal-working machinery.....	\$	94,261	147,328	170,452	228,982
21	Mining machinery.....	\$	490,894	543,408	548,317	462,741
22	Paper-mill machines.....	\$	19,659	8,215	26,516	27,728
23	Printing presses.....	\$	140,964	185,963	119,635	169,532
24	Pumps, power.....	\$	16,695	44,574	26,901	40,324
25	Sewing machines.....	\$	59,128	81,317	118,054	98,584
26	Textile machinery.....	\$	627,790	694,832	554,384	511,088
27	Typewriting machines.....	\$	3,594	7,767	6,409	5,974
28	Washing machines.....	\$	10	149	Nil	218
Totals, Machinery ¹		\$	2,271,846	2,571,652	2,476,531	2,776,280
29	Stamped and coated products.....	\$	178,464	160,593	184,073	169,244
30	Tools.....	\$	221,217	298,759	346,401	368,079
Automobiles and Parts—						
31	Freight.....	No.	162	81	94	123
		\$	106,863	51,198	95,022	149,277
32	Passenger.....	No.	293	162	394	1,003
		\$	273,643	175,867	257,735	622,624
33	Parts of.....	\$	69,122	76,885	125,734	185,386
Totals, Automobiles and Parts ¹		\$	449,628	313,950	478,491	957,287
34	Railway cars and parts.....	\$	31,737	17,837	14,274	14,524
35	Drums, tanks, cylinders.....	\$	38,972	38,033	26,256	11,516
36	Furniture.....	\$	4,554	7,911	6,461	13,972
37	Stoves (except electric).....	\$	3,196	4,430	2,614	12,656
38	Stoves and furnaces, electric.....	\$	7,378	12,526	5,321	8,373
39	Valves.....	\$	18,480	18,778	26,370	54,887
Totals, Iron and Its Products ¹		\$	16,711,935	18,600,768	20,551,388	23,033,333

¹ Totals include other items not specified.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
110,945	200,233	274,421	302,653	280,018	386,433	476,289	494,873	1
128,444	218,738	239,435	285,099	184,272	304,283	350,942	436,030	2
82,180	192,465	232,170	285,816	167,574	240,044	294,048	577,224	3
130,699	226,736	213,487	297,658	134,798	227,269	213,830	299,537	4
515,070	939,983	1,058,793	1,273,788	855,444	1,276,185	1,446,251	1,928,253	
232,721	367,020	278,741	354,759	923,493	1,380,577	1,363,451	1,744,961	5
105,468	172,734	258,668	273,706	174,690	289,299	389,502	442,870	6
20,684	24,543	27,389	46,264	20,727	24,652	27,394	46,287	7
3,706,151	5,364,021	5,242,396	4,530,159	3,724,272	5,400,582	5,249,292	4,514,889	8
193	303	529	676	210	323	553	686	8
81,697	118,908	190,512	221,095	89,028	163,315	202,523	227,221	9
24	99	107	159	208	341	606	637	9
121,790	376,076	365,099	543,311	463,421	844,925	1,120,397	1,424,374	10
1,288	3,511	6,405	8,946	1,371	3,940	6,894	9,692	10
208,648	410,978	525,131	679,397	251,862	463,763	551,179	707,989	
4,948,596	7,105,113	7,272,560	7,502,600	5,417,082	7,781,902	8,240,278	8,663,262	
207	815	2,664	6,148	208	818	2,704	6,255	11
139,604	633,099	2,192,173	5,573,081	140,988	636,298	2,216,719	5,633,049	12
620,473	1,163,198	1,580,654	2,090,350	632,273	1,190,922	1,602,687	2,124,530	12
2,017,558	3,341,370	5,712,752	10,141,308	2,283,771	3,716,319	6,182,218	10,803,750	
151,334	225,254	207,813	268,733	929,400	982,432	1,055,464	1,145,193	13
108,254	80,011	88,092	103,215	374,506	354,952	382,681	413,489	14
211,649	313,897	351,311	241,044	224,872	327,029	360,496	253,210	15
843,278	1,117,330	1,155,711	1,119,692	1,996,244	2,272,405	2,412,822	2,437,225	
482,804	652,931	876,876	1,173,922	487,612	664,740	892,734	1,189,215	16
133,487	293,883	310,982	461,690	158,633	349,045	378,279	519,012	17
20,472	41,304	88,387	305,420	27,808	44,568	98,544	351,148	18
173,271	391,116	458,472	628,666	191,648	401,896	473,572	638,066	19
654,707	1,660,169	2,196,866	3,845,379	768,732	1,824,931	2,397,248	4,128,244	20
1,127,118	1,683,812	1,715,217	3,088,289	1,633,433	2,284,069	2,301,847	3,615,416	21
246,443	214,108	292,399	398,299	293,625	257,580	363,931	473,887	22
317,163	893,032	736,367	1,115,996	495,409	1,116,478	903,287	1,352,574	23
191,168	336,779	360,622	547,804	208,548	381,817	392,168	589,234	24
166,462	217,352	320,634	410,553	237,014	304,246	452,815	625,725	25
2,243,525	2,222,840	2,371,642	2,691,075	3,095,628	3,063,283	3,216,411	3,376,720	26
139,185	249,900	147,930	163,686	142,880	257,667	155,240	178,765	27
183,228	210,922	272,314	520,575	183,238	211,071	272,354	520,793	28
10,766,912	15,808,013	18,562,224	27,403,682	13,847,326	19,127,704	21,914,192	31,086,819	
750,575	887,657	949,891	1,243,829	984,413	1,091,240	1,181,796	1,478,720	29
537,705	835,631	960,631	1,393,674	967,225	1,422,119	1,645,416	2,156,538	30
683	856	994	2,228	848	940	1,091	2,354	31
438,586	624,579	837,026	1,912,256	554,384	679,130	939,896	2,063,583	32
949	2,285	3,055	9,950	1,245	2,447	3,451	10,953	32
563,539	1,451,318	2,106,130	7,723,895	841,235	1,627,185	2,364,932	8,346,519	33
13,677,898	22,100,263	22,580,553	27,180,371	13,760,242	22,178,231	22,706,931	27,379,705	33
14,680,023	24,176,160	25,523,709	36,816,522	15,155,861	24,484,546	26,011,759	37,789,807	
174,431	230,933	323,313	359,756	206,168	250,053	339,152	374,280	34
155,299	304,716	197,145	335,046	235,796	382,907	244,580	363,168	35
119,880	170,894	208,996	470,763	130,734	182,983	221,647	496,305	36
269,631	396,868	493,514	820,375	278,791	405,902	500,461	840,688	37
162,842	203,845	254,335	389,115	171,639	216,799	259,919	398,313	38
164,531	315,669	281,108	391,176	183,281	334,447	307,696	446,070	39
49,098,932	77,477,564	88,428,437	121,742,147	69,126,641	100,056,145	114,253,715	150,239,139	

13.—Principal Imports into Canada for Consumption from United

No.	Item.	United Kingdom.			
		1934.	1935.	1936.	1937.
VI. Non-Ferrous Metals.					
	Aluminium—				
1	Alumina, bauxite and cryolite..... cwt.	224,538	315,104	337,436	189,342
 \$	430,348	817,606	861,254	381,354
2	Aluminium ingots, bars, rods, plates, etc.. cwt.	10,862	11,979	14,397	16,018
 \$	306,429	326,717	392,888	469,740
3	Aluminium kitchen-ware..... \$	4,811	3,826	2,629	4,036
	Totals, Aluminium ¹ \$	780,643	1,221,603	1,389,096	1,121,371
4	Brass and manufactures..... \$	302,845	294,808	361,238	336,788
5	Copper and manufactures..... \$	115,884	127,322	156,579	139,487
6	Lead and manufactures..... \$	41,784	43,306	53,070	65,749
7	Nickel and manufactures..... \$	84,465	104,424	109,648	103,788
Precious Metals and Manufactures—					
8	Electro-plated ware..... \$	207,036	244,453	259,583	279,446
9	Silver, unmanufactured..... \$	71,489	508,966	893,711	661,554
	Totals, Precious Metals ¹ \$	411,237	899,039	1,355,098	1,363,152
10	Tin (totals)..... \$	290,788	626,421	894,962	1,113,286
11	Tin in blocks, pigs, etc..... cwt.	5,808	12,180	18,015	23,245
 \$	255,507	612,065	878,869	1,099,787
12	Zinc..... \$	5,455	7,330	8,177	9,130
13	Alloys..... \$	95,833	70,958	83,944	127,888
14	Clocks and watches..... \$	17,299	45,675	48,526	59,725
Electrical Apparatus—					
15	Batteries, storage..... \$	29,242	38,829	48,119	95,298
16	Dynamos, generators..... \$	21,385	33,041	65,689	157,356
17	Fixtures, electric light..... \$	12,912	9,338	9,823	12,360
18	Lamps, incandescent..... \$	1,021	1,090	1,472	37,554
19	Motors..... \$	128,244	190,675	239,806	243,268
20	Spark plugs, etc..... \$	14,191	9,865	4,376	1,619
21	Switches, etc..... \$	40,139	42,292	47,828	67,537
22	Telephones..... \$	29,759	33,760	84,091	46,875
23	Transformers..... \$	12,113	39,597	15,786	24,922
24	Tubes, radio..... \$	223	1,001	12,228	24,061
25	Wireless apparatus..... \$	63,609	82,278	77,742	131,350
	Totals, Electrical Apparatus ¹ \$	537,963	699,970	1,022,964	1,279,542
26	Gas apparatus..... \$	4,294	4,885	3,586	5,398
27	Metallic articles for agr. implements, <i>n.o.p.</i> \$	7,215	16,097	11,437	9,937
28	Manganese oxide..... cwt.	22	83	72	254
 \$	68	212	199	598
29	Ores of metals, <i>n.o.p.</i> \$	2,202	1,598	5,998	12
30	Printing materials..... \$	20,324	22,050	20,900	22,794
31	Vessels, equipment for..... \$	61,870	181,499	115,053	106,808
	Totals, Non-Ferrous Metals ¹ \$	2,967,035	4,581,470	5,829,425	6,062,639
VII. Non-Metallic Minerals.					
32	Asbestos..... \$	180,217	220,218	241,362	327,950
Clay and Clay Products—					
33	Bricks, fire..... \$	112,636	141,150	193,583	149,486
34	China clay..... cwt.	263,912	400,021	369,276	565,551
 \$	108,700	158,365	161,367	236,948
35	Tableware of china..... \$	2,090,897	2,214,922	2,538,470	2,871,083
	Totals, Clay and Clay Products ¹ \$	2,618,084	2,846,834	3,173,324	3,633,362
Coal and Coal Products—					
36	Anthracite coal..... ton	1,576,562	1,608,620	1,487,490	1,320,681
 \$	7,939,706	7,404,623	6,745,004	6,302,934
37	Bituminous coal..... ton	357,680	330,646	347,894	147,089
 \$	880,758	867,523	961,765	448,606
38	Coal for ships..... ton	2	2	2	1,061
 \$	—	—	—	2,737
39	Coke for fuel..... ton	22,120	27,860	8,643	7,234
 \$	76,143	114,974	40,022	32,694
	Totals, Coal and Coal Products ¹ \$	8,901,363	8,420,489	7,754,952	6,834,386

¹ Totals include other items not specified.² None reported.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
635,244	1,363,339	1,745,761	1,875,106	1,241,609	1,856,059	2,578,380	3,650,911	1
738,152	1,398,212	1,911,057	2,056,835	2,026,589	2,553,076	2,902,275	3,040,061	2
715	2,251	3,749	1,960	11,573	14,234	18,146	17,985	
26,671	77,009	129,481	75,200	333,149	403,828	522,369	545,416	3
61,356	84,376	76,366	60,430	68,788	92,639	80,747	68,564	
1,251,550	2,032,171	2,646,866	2,944,919	2,967,437	3,655,202	4,224,716	4,751,819	
1,231,806	1,640,781	1,891,077	2,391,690	1,699,857	2,082,637	2,369,300	2,855,381	4
361,196	432,299	530,805	724,025	497,919	575,028	716,743	906,088	5
47,081	60,620	66,660	66,139	105,112	115,876	135,443	163,974	6
914,775	897,267	899,085	958,399	1,159,769	1,180,239	1,176,315	1,222,067	7
68,714	132,402	280,888	855,142	288,603	393,208	558,753	1,183,407	8
714,538	2,917,262	3,454,885	1,211,189	786,027	3,426,228	4,937,115	1,872,743	9
1,090,524	3,252,437	3,948,805	2,240,625	1,545,244	4,200,135	5,943,967	3,691,414	
1,215,244	1,248,147	473,601	231,385	1,581,483	2,206,062	2,307,535	2,496,821	10
23,942	23,531	8,423	3,436	31,322	42,283	45,757	51,876	11
1,168,970	1,210,654	418,638	156,629	1,499,613	2,153,515	2,236,476	2,408,521	
309,341	372,978	465,995	493,438	403,525	473,214	566,026	658,606	12
36,032	51,940	64,422	115,168	184,748	260,196	283,239	416,973	13
262,006	395,758	589,213	725,104	1,024,092	1,390,852	1,743,170	2,037,278	14
80,738	117,715	86,346	56,463	110,114	156,770	134,556	152,254	15
150,551	200,143	209,956	348,075	429,093	247,896	284,058	544,312	16
149,768	207,607	219,788	622,371	176,764	232,519	251,484	664,586	17
63,946	132,949	127,335	153,634	81,982	155,997	155,554	252,691	18
543,039	878,186	925,886	1,353,530	682,806	1,116,480	1,184,393	1,650,394	19
203,546	303,720	213,948	55,830	218,915	316,888	220,937	58,679	20
302,436	405,709	503,300	574,122	343,803	452,986	555,917	656,054	21
177,458	375,006	332,297	689,348	207,906	411,960	417,668	736,367	22
34,518	52,623	65,084	110,495	47,440	94,166	81,401	142,442	23
97,400	153,926	264,811	311,752	97,667	154,977	277,039	335,813	24
1,244,416	1,518,552	1,649,208	2,381,553	1,308,472	1,603,330	1,729,158	2,514,195	25
5,036,487	7,076,653	7,597,602	10,361,262	5,915,024	7,943,639	8,757,837	11,991,038	
79,943	104,746	118,502	129,245	90,677	115,433	125,465	143,540	26
577,807	1,045,367	1,598,090	1,382,075	588,469	1,070,395	1,646,682	1,431,643	27
28,090	26,833	36,633	39,841	679,454	619,709	737,754	1,285,095	28
66,219	63,975	82,892	82,957	291,645	235,453	357,866	683,945	
151,638	208,709	182,404	272,999	182,377	256,287	433,780	434,731	29
560,534	730,177	639,594	571,548	585,448	755,757	664,260	599,589	30
102,034	183,445	200,509	230,438	178,638	387,273	330,456	375,707	31
14,142,239	20,858,178	23,305,389	25,400,426	20,171,000	28,496,629	33,685,919	37,037,954	
328,085	465,075	480,995	617,244	518,965	695,323	733,499	954,487	32
967,045	1,346,821	1,417,685	2,041,293	1,079,884	1,488,587	1,612,408	2,190,930	33
293,912	245,495	345,872	305,247	560,248	646,613	715,664	870,820	34
117,715	94,600	127,916	114,765	229,525	254,424	289,755	351,721	
16,058	18,072	25,565	29,158	2,538,943	2,694,903	3,042,463	3,320,207	35
1,877,971	2,532,232	2,711,582	3,400,560	5,178,936	6,094,940	6,593,645	7,744,156	
1,558,781	1,750,853	1,701,101	1,607,410	3,135,351	3,449,139	3,499,857	3,374,854	36
9,937,742	10,431,064	9,959,785	9,291,075	17,877,489	18,112,854	17,788,829	17,310,207	
7,811,916	8,762,949	8,250,148	9,462,616	8,169,740	9,093,959	8,593,046	9,618,618	37
9,987,474	16,087,803	14,476,215	16,392,562	10,868,735	16,956,561	15,433,056	16,870,090	
347,625	280,366	306,039	356,243	347,625	280,366	306,039	357,304	38
445,972	536,174	536,511	660,612	445,972	536,174	586,511	663,349	
599,660	598,283	476,474	377,196	622,034	626,383	496,708	398,524	39
2,844,505	3,370,983	2,639,016	2,202,248	2,921,707	3,487,284	2,730,925	2,291,338	
23,971,756	31,708,568	29,306,212	30,335,051	32,874,722	40,429,524	38,197,232	38,971,240	

13.—Principal Imports into Canada for Consumption from United

No.	Item.	United Kingdom.			
		1934.	1935.	1936.	1937.
VII. Non-Metallic Minerals—concluded.					
Glass—					
1	Carboys, bottles, jars, etc..... \$	65,161	45,378	52,570	52,241
2	Common window glass.....sq. ft.	7,247,061	8,125,661	9,591,316	12,304,701
		232,600	294,910	330,884	430,754
3	Plate glass.....sq. ft.	810,902	833,928	700,683	1,780,233
		298,016	324,618	256,391	571,252
4	Tableware of glass..... \$	47,260	56,079	68,362	96,506
	Totals, Glass ¹ \$	845,266	947,902	925,033	1,429,446
5	Graphite and its products..... \$	35,517	48,019	52,552	51,629
Petroleum and Asphalt—					
6	Asphalt..... \$	41	119	54	1
7	Crude petroleum..... gal.	27,194	34,259	19,833	5,398
		2,938	5,254	3,168	928
8	Fuel oil for ships..... gal.	2	2	2	2
		—	—	—	—
9	Gasolene..... gal.	2	2	450	6,802
		—	—	180	653
10	Kerosene, refined..... gal.	2	4	4,640	Nil
		—	7	887	—
11	Lubricating oils..... gal.	97,872	88,529	94,520	91,142
		50,909	36,609	34,674	31,135
	Totals, Petroleum and Asphalt ¹ \$	66,791	63,889	55,761	63,974
12	Diamond dust or bort..... \$	10,888	23,891	122,176	74,922
13	Sand, silica..... cwt.	441	Nil	Nil	3,900
		799	—	—	737
14	Carbons, electric..... \$	1,939	1,552	726	1,114
15	Diamonds, unset..... \$	62,399	98,378	103,261	96,582
16	Salt..... cwt.	599,631	653,179	574,482	683,686
		244,413	203,935	168,530	205,469
17	Sulphur..... cwt.	196	779	1,337	45,324
		666	1,270	2,571	37,116
	Totals, Non-Metallic Minerals ¹ \$	13,229,645	13,163,008	12,932,009	13,102,638
VIII. Chemicals and Allied Products.					
18	Acids..... \$	371,149	325,940	448,848	550,949
19	Cellulose products (totals)..... \$	100,659	121,842	137,749	132,882
Drugs and Medicines—					
20	Medicinal preparations..... \$	585,168	597,425	584,963	539,082
21	Preparations for spraying..... \$	99,492	92,224	86,171	104,562
	Totals, Drugs and Medicines ¹ \$	834,851	860,572	897,396	816,147
Dyeing and Tanning—					
22	Aniline and coal-tar dyes..... lb.	575,199	534,987	565,619	707,555
		326,831	369,520	357,470	455,397
23	Oak, quebracho and similar extracts..... lb.	172,118	255,465	534,175	250,101
		6,179	7,255	18,089	9,552
	Totals, Dyeing and Tanning ¹ \$	637,291	603,011	603,024	683,293
24	Explosives..... \$	20,700	12,464	19,795	40,681
25	Fertilizers..... \$	12,508	8,628	3,396	51,675
26	Glycerine..... lb.	114,010	1,740,018	101,964	675,984
		12,655	190,001	10,270	106,969
Paints and Varnishes—					
27	Carbon black..... lb.	1,110	239	56,784	65,524
		189	27	3,098	3,543
28	Lithopone..... lb.	6,557,250	6,557,943	7,417,130	8,367,912
		218,938	228,728	256,732	301,419
29	Oxides..... lb.	1,051,392	1,158,317	1,204,588	1,491,019
		138,778	160,769	170,418	187,885
30	Ready-mixed paints..... gal.	26,493	25,287	27,483	28,052
		33,945	35,141	38,374	41,080
31	Varnish..... gal.	10,849	10,595	5,832	8,425
		19,323	20,013	11,021	14,624
32	Zinc white..... lb.	9,805,232	10,449,275	10,410,360	10,587,291
		414,988	408,608	398,292	408,730
	Totals, Paints and Varnishes ¹ \$	1,108,280	1,196,499	1,346,596	1,555,349

¹ Totals include other items not specified.² None reported.

Kingdom, United States, and All Countries, fiscal years 1934-37—continued.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
374,740	365,947	505,911	770,408	563,600	569,255	702,119	1,019,011	1
30,194	117,860	74,637	16,498	23,243,659	28,988,021	33,622,574	45,418,196	2
2,153	6,203	4,127	1,076	623,700	873,637	903,983	1,180,394	
2,045,794	2,183,837	2,315,312	1,985,646	3,057,502	3,186,661	3,510,746	6,052,694	3
652,203	637,551	649,814	573,158	1,031,661	1,039,801	1,046,865	1,763,318	
275,801	488,063	558,913	572,295	493,834	751,519	884,786	991,839	4
2,440,371	2,967,887	3,318,732	3,747,325	4,365,249	5,341,828	5,798,850	7,583,043	
73,056	91,935	78,828	92,475	109,822	141,878	135,731	147,365	5
114,284	134,655	133,495	164,992	114,589	136,422	137,330	168,815	6
732,182,095	815,897,638	898,669,739	924,396,420	1,063,629,697	1,091,352,582	1,198,116,475	1,246,881,256	7
16,660,116	24,969,947	27,408,732	30,755,321	25,010,663	32,500,727	35,564,978	39,562,633	
24,339,038	23,981,591	18,643,709	20,379,589	27,369,216	24,170,241	18,643,709	20,379,589	8
662,338	605,132	540,300	577,554	714,768	608,773	540,300	577,554	
54,358,251	52,133,131	44,681,047	37,420,852	59,524,173	64,616,691	64,587,586	59,939,464	9
3,847,984	3,434,206	3,111,680	2,796,900	4,119,509	4,063,625	4,401,377	4,146,709	
1,674,799	2,038,210	1,282,973	2,917,945	1,676,675	2,039,950	1,292,271	2,918,700	10
121,380	153,243	114,532	232,079	121,777	153,598	116,807	232,166	
9,846,227	10,604,832	13,377,559	14,689,865	9,954,828	10,708,468	13,489,156	14,794,269	11
2,537,721	2,332,997	2,643,633	3,034,666	2,593,587	2,375,752	2,685,733	3,071,588	
24,504,053	32,337,858	34,778,301	39,086,041	33,368,473	40,855,283	44,489,337	49,775,547	
602,643	1,511,318	1,624,119	2,624,307	613,638	1,537,869	1,785,554	2,772,146	12
1,287,004	1,803,097	2,330,415	2,884,684	1,423,947	1,944,581	2,623,959	2,977,679	13
153,835	216,902	227,526	270,182	172,048	235,636	281,228	283,086	
283,091	368,552	398,279	373,490	287,868	371,217	401,166	374,939	14
65,581	40,221	49,637	36,228	388,126	649,474	865,700	1,046,076	15
1,067,296	913,960	931,597	797,233	2,786,338	2,809,141	2,532,358	2,188,525	16
259,723	213,758	205,742	169,279	659,535	596,113	508,792	453,655	
2,853,896	3,070,292	2,715,426	3,417,255	2,858,749	3,272,115	2,717,959	3,463,597	17
2,551,591	2,496,926	2,285,191	2,835,461	2,559,159	2,500,514	2,290,127	2,874,357	
58,923,311	77,256,933	78,088,621	86,809,009	83,396,761	102,428,037	105,421,236	116,948,261	
538,872	552,832	571,054	696,692	1,115,116	1,096,667	1,318,389	1,473,684	18
1,466,430	1,589,756	1,642,216	1,673,527	1,655,043	1,871,289	1,864,591	1,880,260	19
675,921	757,856	885,474	1,059,734	1,673,709	1,763,631	1,925,168	2,026,348	20
321,496	330,183	300,371	502,768	545,745	510,738	412,901	671,582	21
1,067,087	1,186,447	1,345,613	1,731,719	2,621,563	2,715,920	2,968,389	3,274,066	
1,545,102	2,138,001	2,387,013	2,504,405	3,944,647	4,267,888	4,585,399	5,148,175	22
885,393	1,083,803	1,225,588	1,366,026	2,823,456	3,211,123	3,536,124	4,036,864	
25,451,463	22,629,774	19,993,995	13,284,861	31,758,810	25,282,050	30,129,002	26,753,741	23
614,834	606,091	572,465	386,561	775,920	681,006	909,427	869,482	
2,018,283	2,141,493	2,289,751	2,254,144	4,853,532	4,853,908	5,486,921	5,975,440	
280,171	386,653	283,997	374,769	318,017	420,263	324,828	448,157	24
1,037,806	1,649,394	1,235,863	1,691,603	1,989,498	2,484,724	2,147,182	2,643,245	25
21,170	337,986	1,602,639	148,751	762,059	2,681,659	2,004,996	2,172,323	26
1,827	34,142	212,371	30,368	49,584	267,435	246,172	306,336	
10,750,945	12,789,237	12,748,100	14,826,222	10,755,975	12,789,576	12,808,870	14,915,659	27
350,695	612,895	600,567	685,621	351,168	612,927	603,919	690,276	
2,208,571	3,431,609	3,092,544	3,476,222	12,071,365	16,570,839	15,377,770	19,699,846	28
98,074	141,131	137,594	149,601	432,008	577,817	558,114	696,303	
4,103,534	4,547,800	3,278,005	4,248,593	5,477,309	6,538,997	6,458,497	6,608,193	29
457,830	443,167	409,356	542,238	641,425	636,198	616,793	788,527	
61,405	97,782	106,817	148,110	89,435	125,792	137,285	180,142	30
94,095	156,482	172,870	258,147	130,323	198,412	217,575	304,934	
63,365	64,862	83,925	100,166	75,933	76,022	90,507	109,660	31
100,824	117,583	161,491	172,735	124,917	139,342	174,704	190,256	
624,489	1,255,138	1,135,212	3,058,829	11,130,960	12,198,705	11,976,847	14,336,269	32
41,866	85,518	59,690	159,410	489,173	520,577	475,356	591,279	
1,353,655	1,954,822	1,987,443	2,522,492	2,723,858	3,484,897	3,620,464	4,497,644	

13.—Principal Imports into Canada for Consumption from United

No.	Item.	United Kingdom.			
		1934.	1935.	1936.	1937.
VIII. Chemicals and Allied Products—concl.					
1	Perfumery..... \$	101,686	101,677	105,145	142,587
Soap—					
2	Laundry soap..... lb.	395,247	198,785	258,247	319,045
	\$	26,683	14,564	17,200	21,762
3	Toilet soap..... \$	42,084	39,255	51,500	64,612
	Totals, Soap ¹ \$	80,601	69,655	85,044	108,529
Chemicals, Inorganic, <i>n.o.p.</i> —					
4	Sulphate of alumina..... cwt.	57,873	75,735	82,885	105,325
	\$	54,627	63,052	64,638	83,797
5	Ammonia and its compounds..... \$	102,820	192,256	146,756	254,104
6	Compounds of tetra-ethyl lead..... lb.	2	2	2	2
	\$	—	—	—	—
7	Chlorine, liquid..... lb.	2	2	2	2
	\$	—	—	—	—
8	Calcium chloride..... cwt.	48,055	61,225	1,171	300
	\$	63,352	99,556	1,289	326
9	Potash and potassium compounds..... \$	78,271	128,833	97,509	87,185
10	Soda and sodium compounds..... \$	787,664	836,544	935,842	1,017,527
	Totals, Chemicals, Inorganic, <i>n.o.p.</i> ¹ \$	1,589,730	1,875,509	1,725,016	1,722,021
	Totals, Chemicals and Allied Products ¹ . \$	5,662,584	6,210,239	6,336,345	6,957,434
IX. Miscellaneous Commodities.					
Amusement and Sporting Goods—					
11	Films..... \$	131,717	65,448	57,257	77,154
12	Dolls..... \$	1,133	2,144	5,548	3,994
13	Toys..... \$	142,785	155,382	189,825	200,756
	Totals, Amusem't and Sporting Goods ¹ . \$	504,481	468,032	540,510	572,211
Household and Personal Equipment—					
14	Brushes..... \$	105,405	125,751	129,438	140,858
15	Containers (outside coverings)..... \$	1,155,568	1,151,079	1,234,653	1,174,090
Household and Personal Equipment—					
16	Buttons..... \$	13,156	10,823	14,457	13,528
17	Cases and boxes, fancy..... \$	74,987	100,159	114,688	146,746
18	Jewellery, <i>n.o.p.</i> \$	52,580	33,411	40,010	35,444
19	Pocket books, etc..... \$	126,726	144,265	158,102	170,506
20	Refrigerators..... \$	863	925	1,099	1,589
21	Tobacco pipes, etc..... \$	103,114	128,125	121,711	147,108
	Totals, Household, etc., Equipment ¹ \$	736,091	746,114	794,512	879,827
Musical instruments..... \$					
22	Scientific and Educational Equipment—	31,531	46,210	57,731	88,507
23	Philosophical and scientific apparatus..... \$	178,777	54,712	99,175	54,512
24	Surgical instruments, etc..... \$	171,735	270,167	302,107	255,996
	Totals, Scientific and Educational Equipment ¹ \$	464,368	440,015	565,617	475,934
Ships and vessels..... \$					
25	Vehicles, <i>n.o.p.</i> \$	5,469	7,998	23,343	24,653
26	Works of art..... \$	63,212	58,764	147,475	463,595
27	Special imports..... \$	177,650	177,679	218,518	385,235
28	Cartridges..... \$	722,107	2,099,535	1,647,293	1,766,993
29	Electric energy..... k.w.h.	12,061	36,226	21,442	68,202
30	Express parcels..... \$	Nil	Nil	Nil	Nil
31	Pencils, lead..... \$	—	—	—	—
32	Post Office parcels..... \$	1,336	5,958	7,426	8,078
33	Precious stones..... \$	48,472	56,209	72,875	74,695
34	Settlers' effects..... \$	290,042	311,653	373,231	290,911
35	Waste paper clippings..... cwt.	35,318	58,678	86,026	122,164
36	Waste paper clippings..... cwt.	175,687	214,810	179,705	202,024
	\$	25,264	23,429	40,909	29,799
	\$	15,869	15,963	26,410	18,942
	Totals, Miscellaneous Commodities ¹ \$	4,717,973	6,194,730	6,317,717	6,962,416
	Grand Totals, Imports for Consumption \$	105,100,764	111,682,490	117,874,822	129,507,885

¹ Totals include other items not specified.² None reported.

Kingdom, United States, and All Countries, fiscal years 1934-37—concluded.

United States.				All Countries.				No.
1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.	
201,958	233,641	231,622	215,964	436,309	429,737	418,559	433,696	1
2,135,729	3,640,759	4,087,338	4,472,234	2,593,412	3,910,635	4,599,156	4,904,170	2
142,156	222,220	252,255	274,927	172,773	240,948	284,214	303,211	3
19,220	19,641	19,692	24,368	78,740	70,951	85,015	108,717	3
219,355	294,470	349,239	379,772	381,189	437,597	505,797	561,482	
465,852	452,701	491,048	549,666	530,400	534,053	582,492	725,323	4
509,290	473,573	532,925	573,622	569,675	540,634	604,813	701,714	
43,149	41,727	45,928	51,735	167,410	272,069	233,965	351,264	5
1,398,928	1,866,148	2,545,346	3,172,675	1,398,928	1,866,148	2,545,346	3,172,675	6
981,064	1,062,182	1,322,283	1,464,848	981,064	1,062,182	1,322,283	1,464,848	
12,581,630	10,683,705	10,405,676	6,268,312	12,581,630	10,683,705	10,405,676	6,268,312	7
253,204	219,220	223,668	131,503	253,204	219,220	223,668	131,503	
292,617	427,635	285,419	241,465	354,546	493,761	289,939	245,331	8
318,754	423,335	273,665	228,527	391,973	526,057	277,109	231,805	
42,390	46,719	56,918	54,639	404,861	373,128	415,103	374,244	9
1,342,584	1,428,698	1,201,329	1,252,923	2,179,827	2,409,537	2,304,046	2,423,785	10
4,285,590	4,213,696	3,993,864	4,266,807	6,377,076	6,661,127	6,373,544	6,571,205	
14,492,071	17,117,656	17,500,123	19,388,229	25,583,675	28,872,053	29,919,921	33,105,448	
313,027	304,424	284,826	244,561	504,622	453,489	440,356	416,095	11
9,912	21,839	21,383	29,795	114,568	92,090	124,727	134,534	12
289,413	428,994	489,374	632,872	955,967	1,072,175	1,217,758	1,395,885	13
1,049,266	1,402,079	1,749,221	2,167,279	2,317,166	2,593,797	3,078,753	3,565,472	
66,208	85,182	112,404	156,143	266,242	305,217	302,832	396,707	14
580,189	569,701	350,252	410,147	2,339,708	2,391,737	2,283,950	2,278,666	15
86,942	118,017	139,306	199,435	186,391	251,623	228,353	311,506	16
116,790	145,740	160,095	322,626	302,284	351,880	396,137	642,421	17
270,562	396,650	415,494	461,320	585,516	636,290	621,921	653,080	18
157,879	207,407	256,258	400,118	488,770	488,770	552,395	726,707	19
123,803	216,092	330,250	868,182	124,666	217,017	331,349	869,916	20
5,901	21,174	44,915	54,992	292,212	397,349	426,984	421,964	21
1,685,372	2,133,355	2,557,102	3,684,842	3,603,445	4,300,884	4,485,086	5,737,375	
198,057	249,459	331,998	479,909	347,596	446,878	578,121	806,985	22
238,780	328,654	351,247	424,330	468,477	455,408	541,392	560,404	23
575,969	744,135	841,300	933,168	913,269	1,173,795	1,293,050	1,364,473	24
1,478,688	2,000,594	2,219,488	2,464,478	2,282,103	2,844,583	3,229,556	3,443,750	
201,501	416,748	198,817	315,524	209,837	425,151	256,736	350,857	25
155,380	401,041	328,446	908,978	221,759	463,399	478,516	1,375,572	26
137,862	276,251	210,648	833,208	457,502	673,636	575,458	1,363,915	27
4,320,699	4,604,538	5,204,711	9,532,942	5,602,388	7,501,915	7,768,446	12,151,363	28
58,984	87,564	126,965	123,698	71,196	134,652	148,905	192,743	29
3,319,689	3,665,161	4,940,659	4,882,978	3,319,689	3,665,161	4,940,659	4,882,978	30
66,880	68,110	75,292	80,785	66,880	68,110	75,292	80,785	
1,014,412	1,168,575	1,327,653	1,684,880	1,025,575	1,185,592	1,347,768	1,703,750	31
39,171	41,432	63,905	81,660	148,176	153,004	193,649	230,977	32
1,633,731	1,764,823	1,843,415	2,412,888	1,923,933	2,076,582	2,217,027	2,710,643	33
42,088	81,427	50,937	83,034	143,175	208,153	210,191	290,153	34
3,370,697	2,535,645	2,454,626	2,255,406	3,714,401	2,915,858	2,803,668	2,641,324	35
541,308	736,068	667,857	586,862	567,222	759,802	709,330	617,303	36
381,973	339,249	301,489	406,379	398,872	355,632	328,837	427,029	
16,892,841	18,891,409	20,266,185	29,216,009	26,119,404	30,204,250	31,695,725	41,542,299	
238,187,681	303,639,972	319,479,594	393,720,662	433,798,625	522,431,153	562,719,063	671,875,566	

14.—Imports (Dutiable and Free) and Exports of Canadian and Foreign Produce, by Main Classes, and Totals of Duties Collected during the fiscal years ended Mar. 31, 1933-37.

Class.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
IMPORTS.					
Agricultural and Vegetable Products (except chemicals, fibres and wood)—					
Dutiable.....	64,429,763	64,731,623	74,225,634	68,478,004	78,995,471
Free.....	23,859,203	26,097,187	35,192,961	41,864,528	52,404,746
Totals for Group....	88,288,966	90,828,810	109,418,595	110,342,532	131,400,217
Animals and Animal Products (except chemicals and fibres)—					
Dutiable.....	8,274,423	8,986,263	9,796,173	10,477,850	11,274,570
Free.....	7,164,211	10,855,614	10,161,304	13,836,370	16,588,654
Totals for Group....	15,438,634	19,841,877	19,957,477	24,314,220	27,863,224
Fibres, Textiles and Textile Products—					
Dutiable.....	33,039,457	35,918,439	36,788,973	38,575,440	44,807,865
Free.....	28,175,367	43,454,031	45,009,307	51,238,724	60,003,439
Totals for Group....	61,214,824	79,372,470	81,798,280	89,814,164	104,811,304
Wood, Wood Products and Paper—					
Dutiable.....	14,197,304	11,570,874	12,938,798	13,948,545	15,653,143
Free.....	6,308,830	7,787,113	8,260,889	9,323,086	13,274,577
Totals for Group....	20,506,134	19,357,987	21,199,687	23,271,631	28,927,720
Iron and Its Products—					
Dutiable.....	48,280,297	49,509,704	71,529,016	79,531,376	105,174,728
Free.....	10,637,537	19,616,937	28,527,129	34,722,339	45,064,411
Totals for Group....	58,917,834	69,126,641	100,056,145	114,253,715	150,239,139
Non-Ferrous Metals and Their Products—					
Dutiable.....	13,307,378	12,940,794	17,171,874	19,684,599	24,759,332
Free.....	4,788,026	7,230,206	11,324,755	14,001,320	12,278,622
Totals for Group....	18,095,404	20,171,000	28,496,629	33,685,919	37,037,954
Non-Metallic Minerals and Their Products (except chemicals)—					
Dutiable.....	45,599,875	38,522,548	46,902,200	45,951,658	50,015,913
Free.....	42,058,130	44,874,213	55,525,837	59,469,578	66,932,348
Totals for Group....	87,658,005	83,396,761	102,428,037	105,421,236	116,948,261
Chemicals and Allied Products—					
Dutiable.....	15,207,419	15,314,270	16,264,427	16,568,065	18,342,091
Free.....	10,248,013	10,269,405	12,607,626	13,351,856	14,763,357
Totals for Group....	25,455,432	25,583,675	28,872,053	29,919,921	33,105,448
Miscellaneous Commodities—					
Dutiable.....	14,041,184	12,981,897	15,628,827	16,717,559	20,910,521
Free.....	16,767,327	13,137,507	14,575,423	14,978,166	20,631,778
Totals for Group....	30,808,511	26,119,404	30,204,250	31,695,725	41,542,299
Total Imports—					
Dutiable.....	256,377,100	250,476,412	301,245,922	309,933,096	369,933,634
Free.....	150,006,644	183,322,213	221,185,231	252,785,967	301,941,932
Totals, Imports.....	406,383,744	433,798,625	522,431,153	562,719,063	671,875,566
Totals, Duties Collected¹....	77,271,965	73,154,472	84,627,473	82,784,317	92,282,059

¹ Includes the following additional and special duties which cannot be apportioned by groups of commodities: 1933, \$4,683,735; 1934, \$2,342,895; 1935, \$1,903,854; 1936, \$2,053,956; 1937, \$2,096,414.

14.—Imports (Dutiable and Free) and Exports of Canadian and Foreign Produce, by Main Classes, and Totals of Duties Collected during the fiscal years ended Mar. 31, 1933-37—concluded.

Class.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
EXPORTS.					
Agricultural and Vegetable Products (except chemicals, fibres and wood)—					
Canadian produce.....	203,370,418	205,804,526	226,233,097	242,861,877	346,450,628
Foreign produce.....	1,027,989	760,655	838,613	1,192,224	3,146,134
Totals for Group.....	204,398,407	206,565,181	227,071,710	244,054,101	349,596,762
Animals and Animal Products (except chemicals and fibres)—					
Canadian produce.....	54,333,047	75,151,480	86,848,144	100,932,110	133,940,776
Foreign produce.....	433,305	492,675	401,058	604,061	945,469
Totals for Group.....	54,766,352	75,644,155	87,249,202	101,536,171	134,886,245
Fibres, Textiles and Textile Products—					
Canadian produce.....	4,731,094	7,828,684	7,523,144	10,273,697	12,830,212
Foreign produce.....	367,207	383,167	414,579	788,925	1,409,299
Totals for Group.....	5,098,301	8,211,851	7,937,723	11,062,622	14,239,511
Wood, Wood Products and Paper—					
Canadian produce.....	120,886,796	143,142,398	160,932,709	181,631,743	223,918,476
Foreign produce.....	236,928	191,127	288,761	242,904	280,848
Totals for Group.....	121,123,724	143,333,525	161,221,470	182,074,647	224,199,324
Iron and Its Products—					
Canadian produce.....	17,277,099	26,641,482	40,736,038	52,368,057	53,173,175
Foreign produce.....	1,894,056	1,702,969	2,042,729	2,465,602	1,849,499
Totals for Group.....	19,171,155	28,344,451	42,778,767	54,833,659	55,022,674
Non-Ferrous Metals and Their Products—					
Canadian produce.....	96,906,641	168,375,134	191,345,386	212,547,372	230,152,314
Foreign produce.....	413,991	329,235	982,250	5,003,508	1,811,984
Totals for Group.....	97,320,632	168,704,369	192,327,636	217,550,880	231,964,298
Non-Metallic Minerals and Their Products (except chemicals)—					
Canadian produce.....	9,215,837	14,808,912	15,654,323	19,083,643	26,081,028
Foreign produce.....	294,292	468,557	302,786	711,448	954,319
Totals for Group.....	9,510,129	15,277,469	15,957,109	19,795,091	27,035,347
Chemicals and Allied Products—					
Canadian produce.....	11,099,814	13,843,829	15,270,064	16,018,391	19,237,697
Foreign produce.....	270,542	279,267	187,378	414,842	297,169
Totals for Group.....	11,370,356	14,123,096	15,457,442	16,433,233	19,534,866
Miscellaneous Commodities—					
Canadian produce.....	10,243,532	10,357,626	12,083,020	13,113,527	15,397,600
Foreign produce.....	1,975,532	1,703,672	2,200,809	2,018,145	2,367,593
Totals for Group.....	12,219,064	12,061,298	14,283,829	15,131,672	17,765,193
Total Exports—					
Canadian produce.....	528,064,278	665,954,071	756,625,925	849,030,417	1,061,181,906
Foreign produce.....	6,913,842	6,311,324	7,658,963	13,441,659	13,062,314
Totals, Exports.....	534,978,120	672,265,395	764,284,888	862,472,076	1,074,244,220
Total Trade—					
Imports, merchandise.....	406,383,744	433,798,625	522,431,153	562,719,063	671,875,566
Exports, merchandise.....	534,978,120	672,265,395	764,284,888	862,472,076	1,074,244,220
Totals, External Trade.....	941,361,864	1,106,064,020	1,286,716,041	1,425,191,139	1,746,119,786

**15.—External Trade of Canada, by Main Groups and Degree of Manufacture,
According to Origin, fiscal year ended Mar. 31, 1937.**

Origin.	Imports for Consumption.			Exports of Canadian Produce.		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
	\$	\$	\$	\$	\$	\$
Farm Origin—						
1.—Canadian Farm Products—¹						
Field Crops—						
Raw materials.....	676,942	11,023,504	25,933,192	169,267,527	42,712,810	265,019,733
Partly manufactured.....	19,893	308,266	849,597	69,994	2,115,631	2,321,237
Fully or chiefly manufactured.....	8,275,770	3,576,363	14,421,148	22,992,516	28,087,987	64,002,833
Totals, Canadian Field Crops	8,972,605	14,908,133	41,203,937	192,330,037	72,916,428	331,343,803
Animal Husbandry—						
Raw materials.....	2,283,559	3,577,191	14,132,327	5,980,683	22,486,778	31,560,955
Partly manufactured.....	7,581,642	2,255,885	12,896,683	5,349,657	1,178,012	7,023,496
Fully or chiefly manufactured.....	16,923,456	2,030,934	21,991,182	45,514,161	3,560,788	52,235,341
Totals, Canadian Animal Husbandry.....	26,788,657	7,864,010	49,020,192	56,844,501	27,225,578	90,819,792
All Canadian Farm Products—						
Raw materials.....	2,960,501	14,600,695	40,065,519	175,248,210	65,199,588	296,580,688
Partly manufactured.....	7,601,535	2,564,151	13,746,280	5,419,651	3,293,643	9,344,733
Fully or chiefly manufactured.....	25,199,226	5,607,297	36,412,330	68,506,677	31,648,775	116,238,174
Totals, Canadian Farm Products.....	35,761,262	22,772,143	90,224,129	249,174,538	100,142,006	422,163,595
2.—Foreign Farm Products—¹						
Field Crops—						
Raw materials.....	739,453	35,129,315	57,213,730	Nil	67,332	68,226
Partly manufactured.....	3,814,034	2,641,886	28,596,337	9,394	281,233	311,737
Fully or chiefly manufactured.....	23,473,534	11,684,807	60,755,417	5,701,404	906,615	18,147,777
Totals, Foreign Field Crops.	28,027,021	49,456,008	146,565,484	5,710,798	1,255,180	18,527,740
Animal Husbandry—						
Raw materials.....	430,430	4,577,630	5,333,622	Nil	Nil	Nil
Partly manufactured.....	105,000	72,534	218,087	Nil	Nil	Nil
Fully or chiefly manufactured.....	578,321	1,352,402	3,095,496	386,078	58,831	2,945,334
Totals, Foreign Animal Husbandry.....	1,113,751	6,002,566	8,647,205	386,078	58,831	2,945,334
All Foreign Farm Products—						
Raw materials.....	1,169,883	39,706,945	62,547,352	Nil	67,332	68,226
Partly manufactured.....	3,919,034	2,714,420	28,814,424	9,394	281,233	311,737
Fully or chiefly manufactured.....	24,051,855	13,037,209	63,850,913	6,087,482	965,446	21,093,111
Totals, Foreign Farm Products.....	29,140,772	55,458,574	155,212,689	6,096,876	1,314,011	21,473,074
3.—All Farm Products—						
All Field Crops—						
Raw materials.....	1,416,395	46,152,819	83,146,922	169,267,527	42,780,142	265,087,959
Partly manufactured.....	3,833,927	2,950,152	29,445,934	79,388	2,396,864	2,632,974
Fully or chiefly manufactured.....	31,749,304	15,261,170	75,176,565	28,693,920	28,994,602	82,150,610
Totals, All Field Crops.....	36,999,626	64,364,141	187,769,421	198,040,835	74,171,608	349,871,543

¹ In this classification the expression "Canadian Farm Products" refers, in the case of exports, to commodities actually produced, in their original state, on Canadian farms. In the case of imports, it covers all commodities of which the basic raw materials are such as Canadian farms produce. "Foreign Farm Products" covers, in both imports and exports, materials or commodities such as Canada does not produce in their original forms, *e.g.*, cane sugar, tea, rubber, cotton, silk, etc.

**15.—External Trade of Canada, by Main Groups and Degree of Manufacture,
According to Origin, fiscal year ended Mar. 31, 1937—concluded.**

Origin.	Imports for Consumption.			Exports of Canadian Produce.		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
	\$	\$	\$	\$	\$	\$
Farm Origin—concluded.						
3.—All Farm Products—concluded.						
All Animal Husbandry—						
Raw materials.....	2,713,989	8,154,821	10,465,949	5,980,683	22,486,778	31,560,955
Partly manufactured.....	7,686,642	2,328,419	13,114,770	5,349,657	1,178,012	7,023,496
Fully or chiefly manufactured.....	17,501,777	3,383,336	25,086,678	45,900,239	3,619,619	55,180,675
Totals, All Animal Husbandry.....	27,902,408	13,866,576	57,667,397	57,230,579	27,284,409	93,765,126
All Farm Products—						
Raw materials.....	4,130,384	54,307,640	102,612,871	175,248,210	65,266,920	296,648,914
Partly manufactured.....	11,520,569	5,278,571	42,560,704	5,429,045	3,574,876	9,656,470
Fully or chiefly manufactured.....	49,251,081	18,644,506	100,263,243	74,594,159	32,614,221	137,331,285
Totals, Farm Origin.....	64,902,034	78,230,717	245,436,818	255,271,414	101,456,017	443,636,669
Wild Life Origin—						
Raw materials.....	873,214	2,745,081	3,849,973	10,127,657	7,465,389	18,526,730
Partly manufactured.....	194,227	851,487	1,573,848	603,103	35,851	747,363
Fully or chiefly manufactured.....	79,867	105,317	194,765	5,421	124,722	145,032
Totals, Wild Life Origin..	1,147,308	3,701,885	5,618,586	10,736,181	7,625,962	19,419,125
Marine Origin—						
Raw materials.....	15,423	418,116	801,651	918,871	10,347,822	11,538,371
Partly manufactured.....	414	Nil	572	Nil	Nil	Nil
Fully or chiefly manufactured.....	203,232	491,338	2,118,292	5,119,452	2,616,817	15,178,210
Totals, Marine Origin....	219,069	909,454	2,920,515	6,038,323	12,964,639	26,716,581
Forest Origin—						
Raw materials.....	1,826	312,280	425,396	298,833	11,300,171	14,692,804
Partly manufactured.....	17,540	6,754,344	6,868,306	25,448,453	43,330,801	78,615,862
Fully or chiefly manufactured.....	3,773,181	18,291,967	24,548,125	10,446,000	99,091,372	130,785,448
Totals, Forest Origin.....	3,792,547	25,358,591	31,841,827	36,193,286	153,722,344	224,094,114
Mineral Origin—						
Raw materials.....	7,533,773	66,439,539	87,292,009	6,523,855	22,383,447	39,119,453
Partly manufactured.....	2,572,948	7,394,245	11,601,761	68,011,576	112,313,876	206,389,581
Fully or chiefly manufactured.....	35,913,264	170,633,785	224,137,085	18,859,418	12,802,188	77,131,525
Totals, Mineral Origin.....	46,019,985	244,467,569	323,030,855	93,394,849	147,499,511	322,640,559
Mixed Origin—						
Raw materials.....	16,243	124,338	151,161	Nil	Nil	Nil
Partly manufactured.....	574,459	1,887,065	3,103,000	43,737	920,063	1,012,139
Fully or chiefly manufactured.....	12,836,240	39,041,043	59,772,804	6,318,908	10,826,008	23,662,719
Totals, Mixed Origin.....	13,426,942	41,052,446	63,026,965	6,362,645	11,746,071	24,674,858
Recapitulation—						
Raw materials.....	12,570,863	124,346,994	195,133,061	193,117,426	116,763,749	380,526,272
Partly manufactured.....	14,880,157	22,165,712	65,708,191	99,535,914	160,175,467	296,421,415
Fully or chiefly manufactured.....	102,056,865	247,207,956	411,034,314	115,343,358	158,075,328	384,234,219
Grand Totals.....	129,507,885	393,720,662	671,875,566	407,996,698	435,014,544	1,061,181,906

16.—Summary of the External Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, fiscal year ended Mar. 31, 1937.

NOTE.—An analysis of external trade upon the purpose classification in greater detail for the fiscal year ended Mar. 31, 1937, will be found at pp. 824-826 of the Annual Report on the Trade of Canada, 1937, published by the Dominion Bureau of Statistics. Grand totals correspond with those of Table 15, p. 573.

Group and Purpose.	Imports for Consumption.			Exports of Canadian Produce.		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
	\$	\$	\$	\$	\$	\$
Foods, Beverages, and Smokers Supplies (ready for consumption or not)...	16,282,713	26,735,282	106,190,970	240,177,010	77,185,481	392,847,498
Foods ¹	6,197,854	25,743,653	82,512,365	239,823,808	55,594,616	370,559,536
Animals for food.....	Nil	2,468	2,504	2,765,507	11,220,529	14,207,376
Breadstuffs.....	512,093	1,387,743	12,182,345	174,254,404	24,000,588	259,401,599
Chocolate.....	584,575	1,311,996	3,594,598	Nil	Nil	Nil
Fish.....	117,449	570,068	2,043,078	5,364,510	12,125,344	25,092,024
Fruits.....	283,188	15,199,652	24,300,486	6,045,979	462,732	7,483,587
Meats.....	254,707	349,533	1,147,349	31,330,280	3,033,299	36,114,497
Lard, substitutes, etc.....	444	18,254	33,081	3,841,463	36,807	3,913,141
Milk and its products.....	33,759	97,154	394,160	11,164,869	1,691,364	14,447,544
Nuts.....	88,681	755,730	3,748,241	1,350	84	1,840
Oils.....	2,638,970	121,726	5,023,121	Nil	Nil	Nil
Sugar and its products.....	551,248	500,546	20,440,887	220,511	1,107,292	1,683,217
Vegetables.....	244,213	4,439,492	5,900,976	3,563,209	1,404,927	5,809,174
Beverages and infusions ¹	9,339,651	846,648	22,147,318	352,722	21,585,026	22,262,716
Beverages, alcoholic.....	5,987,186	21,145	8,094,533	96,706	21,546,860	21,913,616
Infusions.....	3,330,087	465,766	13,459,852	21,304	10,005	50,188
Smokers supplies.....	745,208	144,981	1,531,287	480	5,839	25,246
Personal and Household Utilities (finished goods).....	18,348,057	31,447,513	60,798,112	9,810,451	3,146,189	24,425,135
Books, stationery, etc.....	2,908,313	11,128,095	14,855,963	849,753	587,215	1,980,263
Clothing.....	5,111,106	4,766,850	12,645,612	5,356,631	424,098	11,168,506
Household utilities.....	8,356,139	9,820,518	21,226,515	1,740,933	180,630	6,351,691
Jewellery, timepieces, etc.....	336,892	1,512,155	4,391,423	110,950	4,062	494,293
Personal utilities.....	881,307	1,270,031	2,988,826	8,481	187	87,729
Recreation equipment, etc.....	754,300	2,949,864	4,689,773	1,743,653	1,949,997	4,342,653
Electric Energy	Nil	80,785	80,785	Nil	3,760,966	3,764,531
Electrical Equipment	1,294,732	10,691,621	12,363,492	1,108,138	836,641	4,569,652
Producers Equipment¹	15,638,353	86,754,411	108,860,131	6,770,247	13,323,552	32,072,291
Abrasives.....	126,232	3,755,872	3,971,649	1,129,287	4,421,462	5,724,891
Containers, packing, etc.....	1,810,170	4,015,635	7,236,698	111,742	981,490	3,320,552
Farm equipment ¹	693,406	10,962,752	12,761,055	1,241,043	5,560,158	10,320,862
Agricultural implements.....	269,303	10,189,739	10,859,033	1,086,598	1,937,598	6,291,423
Animals (except for food).....	169,398	385,264	650,228	51,701	3,452,359	3,639,116
Industrial equipment ¹	5,405,597	30,970,655	38,023,401	3,980,053	326,787	7,918,147
Fisheries equipment.....	1,243,940	418,285	1,846,322	Nil	2,941	5,241
Metal-working machinery.....	244,849	4,172,188	4,474,713	18,406	1,677	27,163
Mining and metallurgical.....	550,263	3,361,749	3,976,793	Nil	Nil	Nil
Office and business.....	123,435	2,950,725	3,099,922	1,181,983	3,093	1,769,772
Printing.....	266,370	3,085,536	3,519,405	4,681	11,254	17,961
Textile and cordage.....	567,929	2,710,514	3,478,017	Nil	Nil	Nil
Tools, n.o.p.....	368,079	1,393,674	2,156,538	394,115	27,945	1,203,200
Fuel.....	6,787,633	31,691,761	40,408,127	167,917	1,954,824	3,723,427
Lubricating oils and greases.....	35,420	3,311,808	3,355,601	67,862	26,104	209,087
Producers Materials (except unmf'd. foods).....	68,730,116	155,038,144	286,774,191	140,368,259	255,613,290	479,544,602
Construction materials.....	3,407,014	12,710,448	18,131,592	26,308,242	22,719,322	59,763,973
Farm materials.....	1,314,417	3,131,559	8,375,022	5,273,873	27,528,859	36,359,467
Manufacturers materials ¹	64,008,685	139,196,137	260,267,577	108,786,144	205,365,109	383,421,162
Textiles, clothing, etc.....	35,119,154	31,868,740	83,781,421	409,605	1,073,210	3,958,609
Dyeing and tanning.....	713,163	2,337,570	6,116,018	Nil	3,627	3,627
Fur and leather goods.....	2,961,086	8,241,500	15,690,256	16,306,412	11,469,155	29,582,375
Metals, raw or refined.....	1,268,834	5,204,263	9,035,383	52,817,682	18,257,901	95,264,881
For furniture and wooden wares.....	38,537	2,176,222	2,356,469	1,169,546	274,091	2,196,386
Pulp, paper, etc.....	428,757	4,859,538	5,443,669	7,869,998	128,445,892	157,021,051
Rubber.....	275,795	2,753,478	11,355,418	Nil	102,424	107,632
Transportation	2,126,708	45,549,176	47,757,029	2,346,200	344,934	30,781,120
Vehicles.....	2,066,593	44,889,298	47,023,650	2,342,308	322,559	30,575,906
Vessels.....	60,115	659,878	733,379	3,892	22,375	205,214
Medical Supplies	1,511,150	3,776,493	6,526,784	712,102	158,399	1,521,148
Arms, Explosives, and War Stores	267,921	680,527	1,021,030	3,409	1,255	267,484
Goods for Exhibition	323,511	2,339,233	2,687,571	Nil	206,919	207,259
Non-Monetary Gold	Nil	Nil	Nil	1,876,500	74,790,769	76,667,269

¹ Includes minor items not shown.

17.—Values of Total Exports, Imports Entered for Consumption, and Duties Collected Thereon, at Certain Ports and by Provinces, fiscal years ended Mar. 31, 1936 and 1937.

NOTE.—The values of imports and exports at the several ports of entry given in the following table indicate that merchandise of the value stated was entered inwards, or passed outwards, at the ports mentioned, but it is not to be inferred that the imports were all for consumption at such ports or that the exports originated there.

Province and Port.	1936.			1937.		
	Total Exports.	Imports for Consumption.	Duty Collected.	Total Exports.	Imports for Consumption.	Duty Collected.
	\$	\$	\$	\$	\$	\$
P.E. Island.						
Totals, P.E. Island.....	579,083	626,225	70,440	1,262,912	758,929	68,959
Nova Scotia.						
Halifax.....	50,152,483	13,267,517	1,128,232	57,859,279	16,220,286	1,377,062
Liverpool.....	3,226,757	117,861	9,461	3,496,938	158,997	7,282
North Sydney.....	2,107,284	206,637	11,437	2,335,044	334,226	11,532
Sydney.....	5,418,528	2,197,789	112,133	6,182,335	2,157,218	118,822
Yarmouth.....	1,708,806	856,713	28,906	2,052,254	726,635	24,267
Totals, Nova Scotia¹.....	67,834,971	18,592,197	1,507,219	77,580,182	21,658,469	1,733,498
New Brunswick.						
Campbellton.....	4,148,603	420,430	18,808	4,980,225	535,958	35,386
Fredericton.....	Nil	594,234	174,835	Nil	986,488	336,673
McAdam Junction.....	2,993,464	81,959	2,237	4,001,752	89,738	9,442
Moncton.....	304,287	868,795	169,471	527,899	1,008,469	166,338
Saint John.....	53,346,976	9,327,545	1,096,687	61,757,499	11,577,373	1,232,406
Woodstock.....	4,791,111	230,487	27,181	6,371,295	327,878	36,386
Totals, New Brunswick¹.....	67,325,392	12,499,336	1,594,510	79,818,915	16,094,784	1,975,338
Quebec.						
Chicoutimi.....	11,540,796	2,873,428	58,839	13,334,960	2,142,746	66,780
Coaticook.....	2,024,866	191,564	17,592	2,604,123	252,611	20,841
Drummondville.....	53,865	2,625,753	167,114	40,686	2,741,962	132,961
Granby.....	4,257	690,008	97,948	5,817	1,023,791	296,754
Hull.....	Nil	1,281,313	87,599	Nil	1,695,537	103,632
Huntingdon (Atheletstan).....	7,725,035	665,173	75,707	10,745,145	684,291	94,028
Montreal.....	150,654,457	137,328,953	18,490,205	209,550,018	157,326,945	21,956,298
Quebec.....	13,811,891	7,468,434	809,087	15,081,068	9,146,332	863,861
Rock Island.....	2,939,699	1,184,450	60,785	3,440,529	1,230,973	50,908
St. Armand.....	11,090,767	128,630	12,853	15,907,979	297,802	10,579
St. Hyacinthe.....	248	2,450,637	73,415	5,436	3,182,755	101,583
St. Johns.....	121,341,145	4,579,087	643,730	114,743,670	5,723,229	691,142
Shawinigan Falls.....	Nil	1,824,856	109,477	Nil	2,596,067	113,971
Sherbrooke.....	325,364	4,017,010	382,529	367,833	4,443,394	397,117
Sorel.....	3,476,885	914,156	44,494	22,172,660	940,806	41,330
Sutton.....	6,686,551	116,692	23,635	7,475,416	162,772	23,196
Three Rivers.....	5,680,597	3,493,542	175,341	12,192,118	5,848,813	196,490
Totals, Quebec¹.....	339,038,748	174,000,329	21,393,542	430,043,015	202,027,078	25,219,713
Ontario.						
Amherstburg.....	54,676	704,879	136,153	67,402	790,705	189,375
Belleville.....	131	975,459	234,962	Nil	1,199,393	225,604
Brantford.....	10,300	3,366,764	331,628	9,745	4,183,538	349,825
Brockville.....	117,861	742,766	83,843	134,506	911,937	117,781
Chatham.....	30,673	2,833,770	684,631	45,870	2,946,404	658,175
Cobourg.....	855,374	1,004,708	170,813	869,272	1,125,222	174,061
Cornwall.....	987,241	2,140,908	140,951	1,240,351	2,489,282	108,037
Fort Erie (Bridgeburg).....	40,228,195	3,011,286	441,006	50,244,502	4,682,091	535,807
Fort Frances.....	9,403,169	936,411	193,234	13,135,746	1,241,173	246,519
Fort William.....	20,952,881	2,149,185	561,732	31,900,670	2,383,845	641,141
Galt.....	2,580	3,674,139	265,401	1,867	4,353,465	293,708
Guelph.....	17,958	2,771,545	183,968	30,817	3,143,004	184,829
Hamilton.....	141,049	22,742,424	3,049,551	360,791	27,431,359	3,725,613
Kingston.....	51,041	948,275	119,598	328,018	1,116,295	116,001
Kitchener.....	8,011	5,233,381	515,030	6,441	6,106,243	572,418

¹ Totals include other smaller ports.

17.—Values of Total Exports, Imports Entered for Consumption, and Duties Collected Thereon, at Certain Ports and by Provinces, fiscal years ended Mar. 31, 1936 and 1937—concluded.

Province and Port.	1936.			1937.		
	Total Exports.	Imports for Consumption.	Duty Collected.	Total Exports.	Imports for Consumption.	Duty Collected.
	\$	\$	\$	\$	\$	\$
Ontario—concluded.						
London.....	Nil	5,152,819	969,298	112,107	5,917,457	926,727
Niagara Falls.....	42,399,429	6,539,347	1,080,837	48,619,499	9,129,544	1,359,952
North Bay.....	Nil	2,360,831	320,942	Nil	2,731,738	318,622
Oshawa.....	1,121	7,917,902	1,548,072	9,798	8,876,036	1,105,702
Ottawa.....	1,392	5,492,942	951,686	1,119	6,402,840	940,096
Parry Sound.....	503,056	885,961	356,655	878,971	956,806	394,496
Peterborough.....	358	3,134,675	382,646	481	4,108,298	477,041
Port Arthur.....	45,013,714	636,241	55,574	61,159,382	1,183,398	183,621
Prescott.....	3,304,787	966,451	375,423	4,294,606	1,037,415	353,526
St. Catharines.....	3,776,481	3,796,458	662,887	3,987,976	5,206,359	769,942
St. Thomas.....	2,157	1,041,738	200,940	2,250	1,161,213	203,578
Sarnia.....	20,539,884	11,908,847	746,418	25,969,753	13,975,375	759,238
Sault Ste. Marie.....	5,608,222	2,976,799	665,683	6,916,286	2,906,291	760,816
Stratford.....	Nil	973,494	137,436	Nil	1,349,591	156,784
Sudbury.....	Nil	2,516,235	128,660	Nil	3,375,276	215,047
Tillsonburg.....	9,493	573,509	217,320	6,288	823,782	302,992
Toronto.....	1,086,782	111,640,461	19,400,068	1,634,012	131,066,460	20,683,279
Welland.....	1,027,425	7,578,612	463,952	2,348,384	8,705,238	576,352
Windsor.....	31,011,622	36,326,686	7,946,981	41,599,200	46,113,093	8,461,367
Woodstock.....	41	998,029	110,727	164	1,518,607	121,757
Totals, Ontario¹	227,369,906	275,376,699	44,688,808	296,382,743	330,492,056	48,321,773
Manitoba.						
Brandon.....	168,304	679,987	50,624	103,714	446,321	59,863
Emerson.....	9,723,229	980,144	111,904	13,407,309	1,634,919	184,467
Winnipeg.....	2,174,596	16,488,062	3,276,054	4,345,475	19,529,766	3,516,356
Totals, Manitoba¹	12,128,307	18,220,367	3,442,511	18,100,670	21,715,012	3,769,390
Saskatchewan.						
Moose Jaw.....	31,100	861,477	116,503	27,740	1,297,642	114,139
North Portal.....	7,041,777	157,968	32,289	7,506,971	260,659	37,790
Regina.....	102,613	3,499,638	579,079	141,885	5,506,729	664,249
Saskatoon.....	Nil	1,596,279	228,140	Nil	1,879,307	208,542
Totals, Saskatchewan¹	7,175,490	6,331,090	982,332	7,676,596	9,133,504	1,053,462
Alberta.						
Calgary.....	Nil	3,488,865	628,745	Nil	5,226,272	684,939
Edmonton.....	105,809	2,871,214	798,365	68,241	3,393,792	840,554
Lethbridge.....	779,520	4,289,437	167,052	487,179	2,035,606	117,438
Totals, Alberta¹	885,329	10,805,910	1,619,442	1,498,144	12,797,422	1,701,552
British Columbia.						
Nanaimo.....	6,398,931	157,421	31,085	8,990,338	146,337	21,157
Nelson.....	202,762	1,079,755	94,942	290,792	358,100	45,496
New Westminster.....	33,448,337	1,792,653	241,482	43,753,720	2,539,358	273,883
Prince Rupert.....	9,054,898	646,405	109,199	4,377,745	689,121	114,781
Vancouver.....	84,924,374	38,458,107	5,906,176	95,466,907	47,737,893	6,811,526
Victoria.....	4,596,531	3,297,894	744,414	5,290,838	3,785,316	833,800
Totals, British Columbia¹	139,984,899	45,980,509	7,217,767	161,288,981	56,816,055	8,241,013
Yukon.						
Totals, Yukon	149,951	270,427	63,979	592,062	365,886	55,952
Prepaid postal parcels, duty received through P.O. Department.....	—	15,974	3,483	—	16,371	3,551
Customs duty stamps.....	—	—	200,282	—	—	137,859
Grand Totals	862,472,076	562,719,063	82,784,317	1,074,244,220	671,875,566	92,282,059

¹ Totals include other smaller ports.

18.—Imports of Canada, by Values Entered for Consumption from British Empire and Foreign Countries, Dutiable and Free, under the General, Preferential, and Treaty Rate Tariffs, fiscal year ended Mar. 31, 1937.

Country.	Dutiable under—			Free under—			Total Imports.
	General Tariff.	Preferential Tariff.	Treaty Tariff.	General Tariff.	Preferential Tariff.	Treaty Tariff.	
	\$	\$	\$	\$	\$	\$	\$
British Empire.							
United Kingdom.....	1,197,308	58,371,934	725,372	15,276,506	53,936,765	—	129,507,885
Irish Free State.....	346	18,194	5,312	5,037	16,578	—	45,467
Africa—British East.....	1,664	669,409	574	1,004,165	1,152,914	—	2,828,726
British South....	3,059	607,800	95,915	208,277	544,178	—	1,459,229
British West.....	6,002	Nil	542,632	560,850	388,651	—	1,498,135
Southern Rhodesia.....	182	Nil	Nil	Nil	1,081,916	—	1,082,098
Australia.....	3,233	1,669,186	626,076	725,950	6,445,378	—	9,469,823
British East Indies—							
British India.....	26,578	4,147,840	1,831	690,285	3,459,421	—	8,325,955
Ceylon.....	6,605	2,454,666	1,135	622,998	877,064	—	3,962,468
Straits Settlements....	1,958	828,920	4,369	8,683,521	1,021,901	—	10,540,669
British Guiana.....	164	4,434,373	2,679	365,758	248,383	—	5,051,357
British West Indies—							
Barbados.....	177	2,139,666	542	1,599	1,568,550	—	3,710,534
Jamaica.....	5,406	2,602,655	3,393	21,159	2,540,292	—	5,172,905
Trinidad and Tobago..	598	2,162,210	23,919	58,437	541,734	—	2,786,898
Other.....	6,405	786,354	1,322	55,005	943,619	—	1,792,705
Fiji.....	92	2,373,856	Nil	Nil	20,693	—	2,394,641
Hong Kong.....	545,759	Nil	18,971	144,586	Nil	—	709,316
Newfoundland.....	5,246	3,607	697	2,143,910	8,763	—	2,162,223
New Zealand.....	4,329	13,568	35,136	1,222,675	4,101,158	—	5,376,866
Totals, British Empire¹	1,833,251	83,332,392	2,101,567	31,862,396	79,036,236	Nil	198,165,842
Foreign Countries.							
Argentina.....	1,647,687	—	531,572	9,545,010	—	Nil	11,724,269
Belgium.....	2,144,715	—	2,178,099	2,362,662	—	10,057	6,695,533
China.....	3,759,262	—	Nil	515,973	—	Nil	4,275,235
Colombia.....	60,303	—	732,650	3,736,064	—	Nil	4,529,017
Czechoslovakia.....	362,350	—	1,891,406	109,806	—	1,420	2,364,982
Denmark.....	39,080	—	75,373	45,676	—	Nil ¹	160,129
France.....	641,172	—	4,440,010	1,253,611	—	119,368	6,454,161
Germany.....	4,818,654	—	4,849,167	1,896,997	—	118,710	11,683,528
Italy.....	302,142	—	1,036,959	383,294	—	29	1,722,424
Japan.....	1,179,377	—	2,366,302	1,168,617	—	82,212	4,796,508
Netherlands.....	1,181,775	—	1,030,498	2,040,188	—	Nil	4,252,461
Norway.....	30,861	—	555,433	127,530	—	131	713,955
Peru.....	5,216	—	Nil	5,266,521	—	Nil	5,271,737
Spain.....	74,508	—	826,601	250,144	—	Nil	1,151,253
Sweden.....	570,302	—	1,046,703	219,194	—	216	1,836,415
Switzerland.....	1,382,812	—	820,180	498,105	—	158	2,701,255
United States.....	75,779,267	—	160,956,932	145,410,570	—	11,573,893	393,720,662
Totals, Foreign Countries¹	96,851,115	—	185,815,309	179,134,261	—	11,909,039	473,709,724
Totals, Imports Entered for Consumption.....	98,684,366	83,332,392	187,916,876	210,996,657	79,036,236	11,909,039	671,875,566

¹ Totals include other minor countries not specified.

19.—Values of Imports into Canada of Merchandise Entered for Consumption, from the British Empire and from Foreign Countries, fiscal years ended Mar. 31, 1933-37.

Country.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
British Empire.					
United Kingdom.....	86,466,055	105,100,764	111,682,490	117,874,822	129,507,885
Irish Free State.....	36,360	31,761	34,922	82,866	45,467
Aden.....	3,091	8,021	6,837	2,563	490
Africa—British East.....	724,978	928,543	1,330,089	3,225,242	2,828,726
British South.....	4,907,064	3,641,261	3,296,780	4,769,003	1,459,229
British West.....	169,075	507,159	587,069	1,002,774	1,498,135
Southern Rhodesia.....	Nil	936	163,431	Nil	1,082,098
Bermuda.....	182,740	163,066	147,706	145,229	156,635
British East Indies—British India.....	4,094,201	5,941,863	6,414,944	7,458,125	8,325,955
Ceylon.....	1,081,022	1,409,959	2,092,512	2,917,879	3,962,468
Straits Settlements.....	886,424	1,001,878	2,970,415	7,198,269	10,540,669
Other.....	1,855	7,730	23,938	37,715	62,655
British Guiana.....	2,299,814	1,389,183	2,449,442	4,757,937	5,051,357
British Honduras.....	50,519	144,820	48,276	131,360	31,176
British Sudan.....	5,511	5,655	12,919	28,905	19,935
British West Indies—Barbados.....	2,856,835	3,126,857	4,861,463	3,430,007	3,710,534
Jamaica.....	3,194,364	2,640,286	4,304,770	4,313,329	5,172,905
Trinidad and Tobago.....	2,428,252	1,986,716	1,357,030	2,593,296	2,786,898
Other.....	1,235,476	1,357,089	1,381,744	1,818,095	1,792,705
Hong Kong.....	515,614	624,336	676,243	1,185,141	709,316
Malta, Cyprus and Gozo.....	429	142	801	226	669
Newfoundland.....	545,527	630,570	1,588,973	2,019,282	2,162,223
Oceania—Australia.....	5,902,587	5,406,082	6,327,175	7,277,099	9,469,823
Fiji.....	2,218,351	1,647,824	1,799,959	1,770,435	2,394,641
New Zealand.....	969,704	2,575,158	2,534,678	3,622,398	5,376,866
Palestine.....	108,476	126,747	91,865	59,313	15,907
Totals, British Empire¹.....	120,384,324	140,403,886	156,186,471	177,721,310	198,165,842
Foreign Countries.					
Abyssinia.....	7,973	11,879	12,873	5,741	7,225
Argentina.....	894,982	2,049,563	2,790,923	3,744,062	11,724,269
Austria.....	179,707	216,557	280,986	331,482	389,067
Belgium.....	3,642,518	3,200,168	3,613,538	5,093,778	1,695,533
Brazil.....	591,141	626,586	835,546	900,877	906,062
Chile.....	21,443	8,323	67,860	59,169	51,913
China.....	1,605,452	2,330,559	2,345,570	3,717,181	4,275,235
Colombia.....	3,365,508	3,569,707	4,563,821	4,202,197	4,529,017
Costa Rica.....	43,222	35,774	47,921	60,978	62,209
Cuba.....	705,824	1,063,239	929,267	441,942	456,614
Czechoslovakia.....	1,769,044	1,403,472	2,310,315	1,969,644	2,364,982
Denmark.....	126,605	294,470	126,383	109,977	160,129
Greenland.....	1,918	183,259	Nil	Nil	230,235
Ecuador.....	5,024	15,715	20,765	75,418	49,482
Egypt.....	407,581	701,155	956,491	814,138	612,684
Finland.....	53,976	42,088	36,315	48,374	55,126
France.....	7,712,558	6,898,411	6,443,695	6,717,668	6,454,161
French Africa.....	52,091	85,266	35,400	63,643	57,228
French East Indies.....	3,405	3,823	22,672	86,097	81,023
St. Pierre and Miquelon.....	86,652	191,039	291,579	42,786	14,281
Germany.....	9,088,905	9,922,704	10,014,434	9,907,635	11,683,528
Greece.....	45,041	49,405	39,938	48,019	67,188
Guatemala.....	14,629	6,330	5,210	16,131	29,696
Haiti.....	336	1,029	62,001	56,811	100,554
Honduras.....	1,256	24,990	53,711	96,056	19,931
Hungary.....	24,274	58,987	67,898	45,955	134,700
Iraq (Mesopotamia).....	156,024	189,229	254,427	345,358	366,369
Italy.....	2,806,361	2,579,950	2,714,878	1,943,916	1,722,424
Japan.....	3,860,911	3,311,687	4,424,654	3,466,081	4,796,508
Latvia.....	4,676	12,060	4,664	10,243	12,120
Mexico.....	880,841	404,943	494,184	885,039	812,701
Morocco.....	78,642	14,786	23,237	14,867	24,902
Netherlands.....	3,715,998	3,241,669	4,343,945	4,258,497	4,252,461
Dutch East Indies.....	224,997	561,251	398,093	780,755	1,000,630
Dutch West Indies.....	1,557,788	867,486	Nil	273,019	207,955
Nicaragua.....	586	Nil	668	Nil	140
Norway.....	452,903	531,287	713,577	862,644	713,955
Panama.....	3,207	9,674	91,799	42,460	9,735
Paraguay.....	Nil	15	13,307	52,082	56,937
Persia.....	71,493	130,752	129,119	156,245	156,838
Peru.....	2,573,521	3,579,726	3,430,387	4,171,236	5,271,737
Poland and Danzig.....	84,861	66,094	154,309	115,818	149,826
Portugal.....	175,368	129,197	199,846	154,213	270,20
Azores and Madeira.....	135,253	87,235	123,912	173,637	131,511

¹ Totals include other minor countries not specified.

19.—Values of Imports into Canada of Merchandise Entered for Consumption, from the British Empire and from Foreign Countries, fiscal years ended Mar. 31, 1933-37—concluded.

Country.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
Foreign Countries—concluded.					
Roumania.....	4,730	4,380	5,396	144,413	177,909
Russia.....	539,419	104,760	265,039	279,441	128,721
Santo Domingo.....	101,310	189,006	1,314,939	126	Nil
Siam.....	Nil	22,595	52,040	158,272	158,240
Spain.....	1,160,753	1,128,755	1,374,755	1,428,984	1,151,253
Canary Islands.....	10,989	2,759	1,640	15,679	8,042
Sweden.....	704,193	1,138,443	1,704,892	1,757,668	1,836,415
Switzerland.....	2,399,635	2,808,308	2,335,297	2,573,076	2,701,255
Syria.....	4,620	2,704	4,559	4,093	2,804
Turkey.....	171,010	174,000	206,188	287,558	202,853
United States.....	232,548,055	238,187,681	303,639,972	319,479,594	393,720,662
Alaska.....	37,799	34,552	99,581	60,115	91,064
Hawaii.....	42,186	40,490	84,904	116,387	204,907
Philippines.....	155,787	365,472	496,105	592,465	787,617
Puerto Rico.....	1,201	1,194	1,296	22,791	24,484
Uruguay.....	7,104	19,908	166,975	206,663	63,377
Venezuela.....	861,835	396,533	834,848	1,270,437	1,006,627
Yugoslavia.....	7,908	33,005	93,817	87,966	90,172
Totals, Foreign Countries¹.....	285,999,420	293,394,739	366,244,682	384,997,753	473,709,724
Grand Totals, Imports.....	406,383,744	433,798,625	522,431,153	562,719,063	671,875,566
Imports, by Continents.					
Europe—United Kingdom.....	86,466,055	105,100,764	111,682,490	117,874,822	129,507,885
Other Europe.....	34,873,626	34,000,977	37,026,683	38,183,295	41,420,040
North America.....	246,478,559	251,249,768	320,722,090	335,938,367	411,616,495
South America.....	10,620,427	11,655,811	15,207,035	19,465,458	28,772,737
Asia.....	12,444,578	16,212,647	20,610,821	28,456,913	35,446,077
Oceania.....	9,133,325	9,671,789	10,746,716	12,786,319	17,449,842
Africa.....	6,367,174	5,906,869	6,435,318	10,013,889	7,662,490

¹ Totals include other minor countries not specified.

20.—Values of Exports of Canadian Produce from Canada to the British Empire and to Foreign Countries, fiscal years ended Mar. 31, 1933-37.

Country.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
British Empire.					
United Kingdom.....	184,361,019	288,582,666	290,885,237	321,556,798	407,996,698
Irish Free State.....	2,247,162	3,514,785	4,120,524	3,039,231	3,799,710
Aden.....	18,692	34,753	40,879	119,667	77,396
Africa—British East.....	409,276	525,434	634,578	824,031	776,150
British South.....	4,001,538	7,286,544	12,127,704	13,502,138	15,573,639
British West.....	303,296	348,097	348,736	610,158	860,337
Southern Rhodesia.....	Nil	393,902	528,777	789,610	843,475
Bermuda.....	1,587,002	1,146,065	1,121,606	1,254,249	1,362,919
British East Indies—British India.....	2,414,586	3,743,360	4,118,175	3,133,869	3,221,062
Ceylon.....	62,744	109,411	237,085	223,086	136,558
Straits Settlements.....	388,438	681,682	1,493,894	1,314,927	1,938,514
British Guiana.....	806,550	800,578	927,198	1,098,866	1,264,852
British Honduras.....	665,922	256,869	209,759	252,938	226,793
British Sudan.....	318	52,402	1,662	70,045	90,559
British West Indies—Barbados.....	1,049,944	1,056,146	1,027,173	1,009,658	1,185,661
Jamaica.....	2,430,410	2,633,019	3,088,267	3,342,343	3,327,133
Trinidad and Tobago.....	1,773,239	1,997,460	2,206,914	2,313,583	3,053,985
Other.....	1,714,122	1,353,324	1,312,310	1,281,720	1,570,585
Gibraltar.....	10,272	9,935	15,375	7,311	15,215
Hong Kong.....	1,062,243	1,253,866	1,300,083	1,466,955	1,372,904
Malta, Cyprus and Gozo.....	101,540	188,871	207,134	416,210	331,513
Newfoundland.....	5,644,225	6,130,698	6,468,918	6,902,882	7,728,211
Oceania—Australia.....	7,312,574	12,138,869	18,081,847	23,974,094	26,953,810
Fiji.....	101,397	176,741	197,946	268,571	363,656
New Zealand.....	3,608,590	4,480,219	7,344,785	10,221,205	11,187,118
Palestine.....	35,220	99,621	135,523	274,156	315,441
Totals, British Empire¹.....	222,118,927	339,006,389	358,199,478	399,311,479	495,598,105

¹ Totals include other minor countries not specified.

20.—Values of Exports of Canadian Produce from Canada to the British Empire and to Foreign Countries, fiscal years ended Mar. 31, 1933-37—concluded.

Country.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
Foreign Countries.					
Argentina.....	2,509,585	2,793,801	4,014,974	3,981,453	3,727,088
Austria.....	6,623	31,268	25,810	44,808	40,849
Belgium.....	14,490,939	12,538,143	11,780,088	11,061,409	23,435,884
Belgian Congo.....	20,691	37,979	50,355	44,681	76,638
Bolivia.....	65,557	245,225	192,595	95,471	113,075
Brazil.....	1,394,230	1,758,380	2,769,578	3,711,283	3,872,899
Chile.....	138,581	276,533	557,303	852,292	956,935
China.....	7,669,228	5,395,970	4,461,465	4,555,726	4,899,488
Colombia.....	389,296	421,154	797,370	919,192	1,148,365
Costa Rica.....	46,442	71,219	66,322	83,640	99,786
Cuba.....	830,177	993,019	1,203,854	1,177,131	1,455,352
Czechoslovakia.....	111,891	71,910	39,015	55,278	193,978
Denmark.....	2,694,212	2,160,467	2,012,197	1,375,236	1,673,355
Ecuador.....	24,753	60,300	140,461	159,550	112,211
Egypt.....	186,008	179,578	297,934	440,085	409,044
Finland.....	262,728	328,539	345,367	722,258	637,581
France.....	12,730,226	11,907,478	9,842,294	7,648,440	11,717,806
French Africa.....	91,199	61,223	97,114	123,567	80,852
French Guiana.....	46,369	60,620	69,085	86,588	63,992
French Oceania.....	899,806	81,940	38,857	57,676	95,524
French West Indies.....	129,409	82,151	94,496	159,164	185,155
St. Pierre and Miquelon.....	7,593,203	4,346,925	350,799	362,255	338,033
Germany.....	8,057,105	10,588,450	4,474,158	4,559,594	7,828,525
Greece.....	341,521	138,313	5,341	429,992	3,082,065
Guatemala.....	91,596	122,975	154,157	89,488	102,173
Haiti.....	77,637	151,528	175,033	103,756	186,015
Honduras.....	108,906	115,228	105,641	130,590	153,140
Iraq (Mesopotamia).....	4,236	30,578	129,231	115,907	14,356
Italy.....	4,126,362	3,543,315	3,630,630	2,376,533	4,656,016
Japan.....	10,327,492	13,802,760	16,935,869	14,844,137	21,629,690
Korea.....	2,248	112,407	9,326	1,999	2,404
Mexico.....	1,311,236	1,680,766	1,885,350	1,719,634	2,854,330
Morocco.....	161,314	58,252	65,774	82,968	1,942,079
Netherlands.....	16,457,910	19,655,271	10,071,978	9,445,227	10,915,611
Dutch East Indies.....	292,991	412,180	564,273	660,472	690,009
Dutch Guiana.....	40,764	45,224	56,908	51,108	59,244
Dutch West Indies.....	71,202	76,487	124,743	141,727	176,941
Nicaragua.....	18,810	20,003	34,187	57,194	78,323
Norway.....	3,695,335	3,912,408	4,788,736	4,576,786	6,907,015
Panama.....	113,407	233,430	239,717	312,402	395,312
Persia.....	5,393	14,225	68,493	176,561	54,750
Peru.....	721,262	926,453	744,730	1,026,433	1,092,274
Poland and Danzig.....	31,340	71,343	402,067	511,929	557,196
Portugal.....	141,112	86,616	95,257	134,735	165,876
Azores and Madeira.....	26,330	27,853	17,996	7,018	15,687
Portuguese Africa.....	842,446	952,519	1,372,743	1,715,147	1,759,576
Roumania.....	57,866	14,209	151,582	22,726	46,709
Russia.....	1,776,946	16,722	21,712	1,201	185,467
Salvador.....	12,673	26,061	59,090	60,195	111,060
Santo Domingo.....	180,965	178,017	261,275	131,304	166,716
Siam.....	4,075	4,326	6,853	7,294	15,576
Spain.....	2,481,717	1,822,626	2,626,984	1,540,740	178,399
Canary Islands.....	14,017	45,151	50,159	56,870	7,483
Sweden.....	2,636,400	1,441,030	1,637,603	2,295,087	3,236,854
Switzerland.....	212,267	275,539	622,264	765,295	517,618
Syria.....	25,785	33,254	33,712	101,962	107,620
Turkey.....	32,206	1,363	8,657	488	1,687
United States.....	197,424,723	220,072,810	304,721,354	360,302,426	435,014,544
Alaska.....	173,388	114,469	146,564	148,249	215,670
Hawaii.....	434,540	620,675	600,193	626,510	1,529,419
Philippines.....	347,368	616,979	833,623	1,123,277	1,512,146
Puerto Rico.....	268,045	353,809	431,296	409,365	342,450
Uruguay.....	71,721	140,273	231,445	368,608	422,837
Venezuela.....	351,777	401,306	484,510	571,687	1,016,621
Yugoslavia.....	2,016	670	1,246	6,172	42,981
Totals, Foreign Countries.....	305,945,351	326,947,682	398,426,447	449,718,938	565,583,801
Grand Totals, Canadian Exports.....	528,064,278	665,954,071	756,625,925	849,030,417	1,061,181,906
Exports, by Continents.					
Europe—United Kingdom.....	184,361,019	288,582,666	290,885,237	321,556,798	407,996,698
Other Europe.....	72,712,079	72,374,404	56,963,021	51,096,279	80,323,584
North America.....	223,319,965	243,225,666	325,520,323	381,792,744	460,382,596
South America.....	6,562,273	7,930,054	10,989,314	12,934,902	13,856,794
Asia.....	22,696,286	26,353,284	30,379,721	28,129,651	36,003,868
Oceania.....	12,364,161	17,508,431	26,279,369	35,190,081	40,150,715
Africa.....	6,048,495	9,979,586	15,608,940	18,329,962	22,467,651

Totals include other minor countries not specified.

21.—Values and Percentages of Canadian Imports and Exports, from and to Stated Countries, passing through the United States, fiscal years ended Mar. 31, 1936 and 1937.

Country whence Imported and to which Exported.	Merchandise Imported through United States.				Merchandise Exported through United States.			
	1936.		1937.		1936.		1937.	
	\$	p.c.	\$	p.c.	\$	p.c.	\$	p.c.
British Empire.								
United Kingdom.....	97,126	0.1	128,721	0.1	53,238,852	16.6	63,283,013	15.5
Irish Free State.....	Nil	—	1,787	3.9	12,952	0.4	86,141	2.3
Australia.....	1,032	0.0	95,000	1.0	7,222,192	30.1	6,555,742	24.3
Bermuda.....	4,177	2.9	754	0.5	84,743	6.8	58,144	4.2
British South Africa.....	5,575	0.1	13,623	0.9	2,319,439	17.2	2,690,508	17.3
British East Africa.....	8,205	0.3	9,650	0.3	397,320	48.2	552,302	70.9
British West Africa.....	Nil	—	8,935	0.6	411,519	67.4	656,722	76.2
British India.....	19,602	0.3	7,008	0.1	430,817	15.3	560,729	16.8
British Guiana.....	112	0.0	Nil	—	92,840	8.4	39,526	3.0
British Honduras.....	Nil	—	—	—	2,777	1.1	2,726	1.2
British West Indies.....	14,437	0.1	6,240	0.0	438,376	5.5	618,283	6.7
Ceylon.....	Nil	—	Nil	—	65,602	29.4	48,787	35.7
Fiji.....	Nil	—	Nil	—	69,832	24.2	57,929	15.9
Hong Kong.....	3,863	0.3	8,295	1.2	119,763	8.2	159,674	11.6
Newfoundland.....	Nil	—	Nil	—	15,922	0.2	62,872	0.8
New Zealand.....	24,150	0.7	Nil	—	1,802,627	17.6	2,866,835	25.6
Palestine.....	7,160	12.1	1,329	8.4	231,367	84.4	156,196	49.5
Southern Rhodesia.....	Nil	—	Nil	—	155,963	19.7	206,280	24.5
Straits Settlements.....	58,635	0.8	5,297	0.1	819,195	62.3	1,184,526	61.0
Totals, British Empire¹..	245,120	0.1	295,696	0.1	68,229,185	17.1	80,092,096	16.1
Foreign Countries.								
Argentina.....	1,628,196	43.5	1,534,819	13.1	1,631,399	41.0	1,357,045	36.4
Austria.....	17,584	5.3	36,814	9.5	32,812	73.2	17,935	40.7
Belgium.....	197,168	3.9	288,396	4.3	379,832	3.4	349,372	1.5
Brazil.....	258,609	28.7	233,771	25.8	2,148,309	57.9	2,027,751	52.3
Chile.....	15,845	26.8	12,951	25.0	437,022	51.3	442,645	46.2
China.....	766,338	20.6	1,242,156	29.0	482,938	10.6	486,991	9.9
Colombia.....	172,922	4.1	260,501	5.8	630,752	68.6	745,916	64.8
Cuba.....	255,061	57.7	294,990	64.6	554,680	47.1	545,636	37.4
Czechoslovakia.....	20,382	1.0	159,089	6.7	15,903	28.8	116,179	59.0
Denmark.....	4,885	4.4	5,418	3.4	218,640	15.9	301,234	18.0
Egypt.....	30,429	3.7	65,484	10.7	313,203	71.2	278,212	68.0
France.....	139,309	2.1	112,197	1.7	1,001,463	13.1	1,308,366	11.1
French Africa.....	20,746	32.6	8,295	14.5	56,513	45.7	75,822	93.7
French West Indies.....	Nil	—	—	—	23,674	14.9	21,529	11.6
Germany.....	62,550	0.6	294,975	2.5	346,079	7.6	1,180,040	15.0
Greece.....	24,057	50.1	39,683	59.1	136,985	31.9	6,443	0.2
Hawaii.....	6,790	5.8	100	0.0	9,827	1.6	3,557	0.2
Italy.....	142,935	7.4	375,397	21.8	1,427,942	60.1	1,382,121	29.7
Japan.....	118,136	3.4	497,091	10.4	782,507	5.3	1,852,500	8.6
Mexico.....	559,581	63.2	301,949	37.2	1,618,386	94.1	2,287,698	79.6
Netherlands.....	510,231	12.0	423,185	10.0	2,590,439	27.4	1,423,225	13.0
Dutch East Indies.....	234,994	30.1	150,281	15.0	242,903	36.8	341,040	49.4
Norway.....	1,886	0.2	16,170	2.3	549,298	12.0	1,107,422	16.0
Peru.....	449	0.0	2,205	0.0	376,895	36.7	496,885	45.4
Philippine Islands.....	230,415	38.9	288,903	36.7	229,892	20.5	272,647	18.0
Portugal.....	4,791	3.1	1,559	0.6	110,817	82.2	149,464	90.1
Portuguese Africa.....	Nil	—	Nil	—	854,554	49.8	685,608	38.7
Russia.....	3,241	1.2	38,387	29.3	1,201	100.0	185,397	99.9
Spain.....	35,901	2.5	169,717	14.8	1,371,202	89.0	142,771	80.0
Sweden.....	11,810	0.7	36,874	2.0	581,079	25.3	772,856	23.7
Switzerland.....	42,085	1.6	14,777	0.5	68,971	9.0	63,805	11.8
Turkey.....	127,942	44.5	101,963	50.3	389	79.7	1,255	13.7
Uruguay.....	50,685	24.5	33,104	52.2	148,142	40.2	129,641	30.7
Venezuela.....	20,070	1.6	8,570	0.9	533,277	93.3	972,273	95.6
Totals Foreign Countries¹	6,037,144	9.2	7,338,120	9.2	21,867,711	24.5	23,611,239	18.0
Grand Totals.....	6,282,264	2.6	7,633,816	2.7	90,096,896	18.4	103,703,335	16.5

¹ Totals include other countries not specified but are exclusive of trade with the United States.

Subsection 10.—Comparison of the Volume of Imports and Exports.

The statistics of the external trade of Canada are analysed in this subsection to reveal changes in the physical volume of external trade as well as in the dollar value of that trade. Value figures alone may be somewhat misleading when used to show the physical growth of production and external trade. When, for example, Table 1 of this chapter is examined, it seems to show stagnation in our external trade between the early 70's and the middle 90's of last century and a very rapid growth thereafter. Yet we know that the apparent stagnation was partly due to the fall in general prices between the '70's and the middle '90's, while the rapid growth of the later figures is exaggerated by the rise of prices after 1897, especially in the war period, 1914 to 1921. Since 1929 another precipitate decline in prices has exaggerated the actual decrease of trade. Thus the figures as published give us no true measure of the volume of our external trade, yet, of the commodities that satisfy human needs, it is the *volume* rather than the *value* with which the masses of the population are more intimately concerned. Volume is, from many points of view, a more important consideration than value, and it is desirable to secure a record of the fluctuations in the volume of the country's trade as distinguished from the value thereof. This objective is attempted with regard to world trade in Subsection 1 of this chapter in which the internationally familiar term 'quantum' has the same significance as 'volume' here. Table 22 which follows serves the same purpose with regard to Canadian external trade.

The method adopted for ascertaining the fluctuations in volume has been to take a base year—1936—and to revalue the quantities of each commodity imported or exported in any given year at the average import or export value of that commodity in the standard or base year. Where quantities are not available, the values of items are assumed to have moved in the same direction and in the same proportions as closely related commodities. For this reason the results must not be regarded as of great precision but, since the value of goods not returned by quantity and of those not comparable over a limited series of years is small in comparison with the total trade, the amount of error introduced on this account is inconsiderable. By this method it is comparatively easy to compare the volume of the trade in a particular year with that in a recent year and the margin of error is fairly small. When, however, a comparison of the volume of trade in a particular year with that of a more remote year is undertaken, the margin of error is very much greater. Certain new commodities have come into existence in the course of the period, while the qualities of others have been materially changed; further, various new items have been added to the customs classifications, and it is not always possible to say just what customs items at present correspond with those of a year as long past as 1914. For these reasons comparisons with the pre-war fiscal year ended 1914 were discontinued after 1929. This comparison for 1929 and certain previous years appeared on pp. 581-583 of the 1930 Year Book. For similar reasons the retention of 1926 as the base year was tending to lessen the reliability of recent calculations, and, consequently, 1936 has been taken as a new base year in the present edition. Comparisons with 1936 are carried back to 1932.

In Table 22 the values and volumes of imports and exports, respectively, for the years 1932 to 1937 are compared with 1936, for the main groups, as follows: the

imports and exports are first shown at the values at which the trade was recorded; the same imports and exports are then shown at the value they would have had if the average price or unit value had been the same in each year as it was in 1936. In other words, the figures on the basis of 1936 average values enable a comparison to be made of the imports or exports for the given years on the basis of variations in quantity only, variations due to different prices having been eliminated. Index numbers of declared values, that is, the total declared values of the imports or exports in each year expressed as percentages of 1936, are then given. These are followed by the index numbers of average values, which show the prices at which goods were imported or exported in each year expressed as percentages of the prices in 1936. Finally, the index numbers of physical volume show the relative quantity of merchandise imported or exported in each year expressed as a percentage of the quantity of the same merchandise in 1936.

The fiscal year 1937 shows a general increase in the volume of imports under all groups, indicative of the recovery of the purchasing power of the people of Canada. The greatest change since the low period of the depression represented by the fiscal year 1933 is the increase in the imports of iron and its products.

In the latter half of Table 22, dealing with exports, the index numbers show a very encouraging recovery since the fiscal year 1933 in both the volume of exports and in the average values or the prices at which they sold in the world markets. Recovery in volume has been particularly marked in the cases of the wood and paper, iron, and non-metallic mineral groups. These products represent to a large extent capital goods or materials, and the demand for them was very much curtailed during the worst years of the depression.

The index numbers of average values of imports rose from 88.3 in 1933 to 102.1 in 1937, or by about 16 p.c., while the index of average values of exports rose in the same period from 78.6 to 107.0, or by 36 p.c. This greater rise in the prices of exports than in those of imports represents welcome progress toward a betterment in Canada's barter terms in world trade, which suffered so severely during the depression owing to the much greater decline in the prices of primary goods than in those of highly fabricated commodities.

22.—Comparison of the Values and Volumes of the External Trade of Canada, by Main Groups, fiscal years ended Mar. 31, 1932-37.

IMPORTS FOR CONSUMPTION.

Group.	1932.	1933.	1934.	1935.	1936.	1937. ¹
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Values as Declared.						
Agricultural and Vegetable Products.....	128,599	88,289	90,829	109,419	110,342	131,400
Animals and Their Products.....	24,563	15,439	19,842	19,957	24,314	27,863
Fibres and Textiles.....	83,879	61,215	79,372	81,798	89,814	104,811
Wood and Paper.....	32,030	20,506	19,358	21,200	23,272	28,928
Iron and Its Products.....	98,298	58,918	69,127	100,056	114,254	150,239
Non-Ferrous Metals.....	34,802	18,095	20,171	28,497	33,686	37,038
Non-Metallic Minerals.....	102,147	87,658	83,397	102,428	105,421	116,948
Chemicals and Allied Products.....	30,731	25,455	25,584	28,872	29,920	33,105
Miscellaneous.....	43,455	30,809	26,119	30,204	31,696	41,544
Totals, Declared Values.....	578,504	406,384	433,799	522,431	562,719	671,876

¹ Subject to revision.

22.—Comparison of the Values and Volumes of the External Trade of Canada, by Main Groups, fiscal years ended Mar. 31, 1932-37—continued.

IMPORTS FOR CONSUMPTION—concluded.

Group.	1932.	1933.	1934.	1935.	1936.	1937. ¹
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
On the Basis of 1936 Average Values.²						
Agricultural and Vegetable Products.....	115,642	88,862	93,225	105,583	110,342	126,983
Animals and Their Products.....	22,214	19,579	22,705	22,404	24,314	25,900
Fibres and Textiles.....	93,930	113,647	80,205	82,647	89,814	98,906
Wood and Paper.....	25,901	17,760	18,210	21,728	23,272	28,934
Iron and Its Products.....	88,132	53,683	74,398	103,237	114,254	148,360
Non-Ferrous Metals.....	39,671	21,031	22,712	28,781	33,686	41,584
Non-Metallic Minerals.....	107,414	86,560	93,520	94,819	105,421	113,610
Chemicals and Allied Products.....	28,450	25,102	25,600	28,629	20,920	32,851
Miscellaneous.....	43,030	33,950	28,760	30,328	31,696	40,670
Totals, at 1936 Average Values.....	564,384	460,174	465,335	518,156	562,719	657,798
Index Numbers of Declared Values.						
	(1936=100.) ²					
Agricultural and Vegetable Products.....	116.5	80.0	82.3	99.2	100.0	119.1
Animals and Their Products.....	101.0	63.5	81.6	82.1	100.0	114.6
Fibres and Textiles.....	93.4	68.2	88.4	91.1	100.0	116.7
Wood and Paper.....	137.6	88.1	83.2	91.1	100.0	124.3
Iron and Its Products.....	86.0	51.6	60.5	87.6	100.0	131.5
Non-Ferrous Metals.....	103.3	53.7	59.9	84.6	100.0	110.0
Non-Metallic Minerals.....	98.9	83.2	79.1	97.2	100.0	110.9
Chemicals and Allied Products.....	102.7	85.1	85.5	96.5	100.0	110.6
Miscellaneous.....	137.1	97.2	82.4	95.3	100.0	131.6
Total Indexes of Declared Values.....	102.8	72.2	77.1	92.8	100.0	119.4
Index Numbers of Average Values.						
Agricultural and Vegetable Products.....	111.2	99.4	97.4	103.6	100.0	103.5
Animals and Their Products.....	110.6	78.9	87.4	89.1	100.0	107.6
Fibres and Textiles.....	89.3	53.9	92.1	99.0	100.0	106.0
Wood and Paper.....	123.7	115.5	106.3	97.6	100.0	90.0
Iron and Its Products.....	111.5	109.6	92.9	96.9	100.0	101.3
Non-Ferrous Metals.....	85.2	86.0	84.4	99.0	100.0	89.1
Non-Metallic Minerals.....	95.0	101.3	89.2	108.0	100.0	102.9
Chemicals and Allied Products.....	108.0	101.4	99.9	100.8	100.0	100.8
Miscellaneous.....	101.0	90.7	90.8	99.6	100.0	102.1
Total Indexes of Average Values.....	102.5	88.3	93.0	100.8	100.0	102.1
Index Numbers of Physical Volume.						
Agricultural and Vegetable Products.....	104.8	80.5	84.5	95.7	100.0	115.1
Animals and Their Products.....	91.4	80.5	93.4	92.1	100.0	106.5
Fibres and Textiles.....	104.6	126.5	96.0	92.0	100.0	110.1
Wood and Paper.....	111.3	76.3	78.2	93.4	100.0	124.3
Iron and Its Products.....	77.1	47.0	65.1	90.4	100.0	129.9
Non-Ferrous Metals.....	117.8	59.5	67.4	85.4	100.0	123.4
Non-Metallic Minerals.....	101.9	82.1	88.7	89.9	100.0	107.8
Chemicals and Allied Products.....	95.1	83.9	85.6	95.7	100.0	109.8
Miscellaneous.....	135.8	107.1	90.7	95.7	100.0	128.3
Total Indexes of Physical Volume.....	100.3	81.8	82.7	92.1	100.0	116.9

EXPORTS OF CANADIAN PRODUCE.

Values as Declared.	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Agricultural and Vegetable Products.....	204,398	203,371	205,805	226,234	242,862	346,451
Animals and Their Products.....	68,799	54,333	75,151	86,848	100,932	133,941
Fibres and Textiles.....	5,512	4,730	7,829	7,523	10,274	12,830
Wood and Paper.....	175,740	120,887	143,142	160,933	181,832	223,918
Iron and Its Products.....	15,463	17,277	26,641	40,736	52,368	53,173
Non-Ferrous Metals.....	92,761	96,906	168,375	191,345	212,547	230,152
Non-Metallic Minerals.....	13,456	9,216	14,809	15,654	19,084	26,081
Chemicals and Allied Products.....	10,536	11,100	13,844	15,270	16,018	19,238
Miscellaneous.....	13,367	10,244	10,358	12,033	13,113	15,398
Totals, Declared Values.....	600,032	528,064	665,954	756,626	849,030	1,061,182

For footnotes, see end of table, p. 585.

22.—Comparison of the Values and Volumes of the External Trade of Canada, by Main Groups, fiscal years ended Mar. 31, 1932-37—concluded.

EXPORTS OF CANADIAN PRODUCE—concluded.

Group.	1932.	1933.	1934.	1935.	1936.	1937. ¹
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
On the Basis of 1936 Average Values.²						
Agricultural and Vegetable Products.....	260,684	285,917	238,053	227,209	242,862	306,908
Animals and Their Products.....	74,076	68,824	83,932	90,031	100,932	130,634
Fibres and Textiles.....	6,658	6,169	8,541	7,282	10,274	11,674
Wood and Paper.....	132,979	106,264	142,565	161,416	181,832	211,784
Iron and Its Products.....	12,065	13,004	26,187	41,423	52,368	50,902
Non-Ferrous Metals.....	146,888	157,881	196,725	231,099	212,547	219,611
Non-Metallic Minerals.....	12,446	9,944	15,758	16,677	19,084	25,726
Chemicals and Allied Products.....	9,449	9,983	14,420	15,120	16,018	19,771
Miscellaneous.....	15,242	13,824	12,363	13,528	13,113	14,813
Totals, at 1936 Average Values.....	670,487	671,810	738,544	803,785	849,030	991,823
Index Numbers of Declared Values.						
	(1936=100.) ²					
Agricultural and Vegetable Products.....	84.2	83.7	84.7	93.2	100.0	142.7
Animals and Their Products.....	68.2	53.8	74.5	86.0	100.0	132.7
Fibres and Textiles.....	53.6	46.0	76.2	73.2	100.0	124.9
Wood and Paper.....	96.6	66.5	78.7	88.5	100.0	123.1
Iron and Its Products.....	29.5	33.0	50.9	77.8	100.0	101.5
Non-Ferrous Metals.....	43.6	45.6	79.2	90.0	100.0	108.3
Non-Metallic Minerals.....	70.5	48.3	77.6	82.0	100.0	136.7
Chemicals and Allied Products.....	65.8	69.3	86.4	95.3	100.0	120.1
Miscellaneous.....	101.9	78.1	79.0	92.1	100.0	117.4
Total Indexes of Declared Values...	70.7	62.2	78.4	89.1	100.0	125.0
Index Numbers of Average Values.						
Agricultural and Vegetable Products.....	78.4	71.1	86.0	99.6	100.0	112.9
Animals and Their Products.....	92.9	78.9	89.5	96.5	100.0	102.5
Fibres and Textiles.....	82.8	76.7	91.7	103.3	100.0	109.9
Wood and Paper.....	132.2	113.8	100.4	99.7	100.0	105.7
Iron and Its Products.....	128.2	132.9	101.7	98.3	100.0	104.5
Non-Ferrous Metals.....	63.2	61.4	85.6	82.8	100.0	104.8
Non-Metallic Minerals.....	103.1	92.7	94.0	93.9	100.0	101.4
Chemicals and Allied Products.....	111.5	111.2	96.0	101.0	100.0	97.3
Miscellaneous.....	87.7	74.1	83.8	89.3	100.0	103.9
Total Indexes of Average Values...	89.5	78.6	90.2	94.1	100.0	107.0
Index Numbers of Physical Volume.						
Agricultural and Vegetable Products.....	107.3	117.7	98.0	93.6	100.0	126.4
Animals and Their Products.....	73.4	68.2	83.2	89.1	100.0	129.4
Fibres and Textiles.....	64.8	60.0	83.1	70.9	100.0	113.6
Wood and Paper.....	73.1	58.4	78.4	88.8	100.0	116.5
Iron and Its Products.....	23.0	24.8	50.0	79.1	100.0	97.2
Non-Ferrous Metals.....	69.1	74.3	92.6	108.7	100.0	103.3
Non-Metallic Minerals.....	65.2	52.0	82.6	87.4	100.0	134.8
Chemicals and Allied Products.....	59.0	62.3	90.0	94.4	100.0	123.4
Miscellaneous.....	116.2	105.4	94.3	103.2	100.0	113.0
Total Indexes of Physical Volume...	79.0	79.0	87.0	94.7	100.0	116.8

¹ Subject to revision.

² Since the publication of the 1937 Year Book the base year for these calculations has been changed from 1926 to 1936.

Section 4.—The Tourist Trade of Canada.*

Tourist Expenditures in Canada.—In recent years the tourist trade has become an important source of revenue in certain sections of the Dominion, materially affecting the balance of trade. It represents the economic disposition of national assets in which Canada is particularly rich, namely: its picturesque scenery; its invigorating climate; its opportunities for hunting, fishing, and boating, as well as for winter sports—for the exploitation of which a considerable capital expenditure has been made on hotel accommodation, improved highways and other attractions. Those entering from the United States in automobiles are by far the most important class of tourist. The business accruing to the Dominion in this manner represents some return for expenditures on highways which have been very large in the period since the War. In order to attract this traffic, highways have been built through regions of picturesque scenery, such as the Rocky mountains, northern Ontario, and the Laurentians and Gaspé in Quebec. A further asset for Canada arises from the fact that these scenic regions with their invigorating climate are at their best in the summer holiday season when motorists are most ready to travel. The expenditure of travellers coming to Canada from other countries has the same effect, in so far as its influence on the balance of trade is concerned, as the export of additional commodities would have. Indeed, in so far as commodities are sold to tourists travelling in the Dominion, our exportable surplus of such commodities is reduced.

It is impossible to obtain a direct record of expenditures of this kind. Moreover, even a rough estimate of the total is extremely difficult to make, visitors to Canada being of all classes, engaging in widely different activities or forms of recreation, remaining for varying periods, with expenditures undoubtedly ranging from very small to very large amounts.

Tourists who enter Canada may be divided into two broad classes: (1) those coming in *via* ocean ports; (2) those entering from the United States, the latter subdivided into entries by (a) automobile, (b) rail or steamer, (c) other modes of travel as bus, aeroplane, ferry, etc. In 1937 these classes are estimated to have expended in Canada (1) \$16,972,000, and (2) \$277,710,000, respectively, with entries under (a) \$181,332,000, (b) \$69,751,000, and (c) \$26,627,000.

The Department of National Revenue records the number of tourists entering Canada in automobiles from the United States through each of the ports of entry along the border. Estimates of the expenditures of tourists of this class in 1937, according to the provinces by which they entered, are as follows: Maritime Provinces, \$12,390,000; Quebec, \$36,033,000; Ontario, \$117,029,000; Manitoba, \$2,321,000; Saskatchewan, \$946,000; Alberta, \$1,115,000; and British Columbia, \$11,498,000.

Expenditures of Canadian Tourists Abroad.—Canadian tourists visiting other countries travel in the main to the British Isles and other European countries on visits home, or as sightseers. Again, many of them, especially elderly or delicate persons, go to Florida, Bermuda or the West Indies. These tourists may be classified in the same way as those entering Canada. The total expenditures of such Canadian tourists to other countries were estimated in 1937 to be as follows: to overseas countries, \$22,335,000; to the United States by automobile, \$48,893,000; to the United States by rail or steamer, \$24,194,000; and to the United States by other modes of travel, \$29,000,000; a total of \$124,422,000.

* Abridged from "The Tourist Trade in Canada, 1920-26", and reports for each year from 1927 to 1937, inclusive, published by the Dominion Bureau of Statistics and obtainable on application. These reports contain a full explanation of the methods used in making the estimates.

Summary.—For the years 1924 to 1937 the total estimated expenditures of tourists from other countries in Canada, as compared with those of Canadian tourists in other countries, are given in Table 23.

23.—Estimated Tourist Expenditures in Canada and of Canadians Abroad, calendar years 1924-37.

Year.	By Tourists from Other Countries in Canada.					By Canadian Tourists in Other Countries.	Excess by Tourists from Other Countries in Canada.
	Via Ocean Ports.	Via Automobile from U.S.	Via Rail or Boat from U.S.	Via Bus, Aeroplane, etc. from U.S.	Total.		
	\$	\$	\$	\$	\$	\$	\$
1924.....	17,012,000	76,662,000	79,328,000	1	173,002,000	84,973,000	88,029,000
1925.....	15,430,000	98,416,000	79,328,000	1	193,174,000	88,160,000	107,014,000
1926.....	12,235,000	109,604,000	79,328,000	1	201,167,000	98,747,000	102,420,000
1927.....	14,444,000	153,768,000	70,265,000	1	238,477,000	108,750,000	129,727,000
1928.....	13,735,000	188,974,000	72,521,000	1	275,230,000	107,522,000	167,708,000
1929.....	13,794,000	215,577,000	80,008,000	1	309,379,000	121,645,000	187,734,000
1930.....	12,955,000	202,409,000	63,874,000	1	279,238,000	100,389,000	178,849,000
1931.....	12,018,000	188,129,000	50,629,000	1	250,776,000	76,452,000	174,324,000
1932.....	10,543,000	159,538,000 ²	42,067,000 ²	1	212,448,000 ²	57,403,000	155,045,000
1933.....	7,763,000	77,250,000 ²	32,111,000 ²	1	117,124,000 ²	50,860,000	66,264,000
1934.....	9,455,000	86,259,000	34,260,000	16,000,000	145,974,000	63,658,000	82,316,000
1935.....	10,117,000	132,162,000	53,499,000	19,000,000	214,778,000	95,600,000 ³	119,178,000 ³
1936.....	12,946,000 ³	153,509,000 ³	64,844,000	20,000,000 ³	251,299,000 ³	110,400,000 ³	140,899,000 ³
1937 ⁴	16,972,000	181,332,000	69,751,000	26,627,000	294,682,000	124,422,000	170,260,000

¹ Information not available on a comparable basis for the years 1924-33.

Book. ² Converted into Canadian funds at average rates of exchange for the period.

³ Revised since publication of the 1937 Year Book.

⁴ Preliminary figures.

Until the depression made itself felt in 1930, there was a steady increase in the amounts spent both by tourists from other countries in Canada and by Canadians in other countries. During the years 1930-32 the tourist trade, in spite of successive declines, exhibited a surprising vitality as compared with the generally depressed state of trade and industry. In each of these years the expenditures of tourists in Canada (and in the latter two the balance after deducting the corresponding expenditures of Canadians in foreign countries) constituted an 'invisible' export of greater value than any single commodity exported. A marked contraction in both volume of travel and tourist expenditures occurred in 1933 and conditions in 1934 were very little better. A pronounced improvement in tourist trade took place in 1935. The upward trend continued in 1936 and again in 1937, in which year the value of the tourist trade to Canada was but little short of the pre-depression peak level.

Section 5.—Balance of International Payments, 1920-37.*

"Balance of Trade" figures are frequently misinterpreted owing to the persistence of the doctrine long ago exploded that a nation's trade is necessarily in a healthy state when exports exceed imports, necessitating an import of gold to make up the difference. Trade was then said to show a 'favourable balance'. This theory took account only of the 'visible' or commodity items of trade, whereas the true

* Abridged from the annual report "Canada's Balance of International Payments", and from the special report "The Canadian Balance of International Payments, 1926-1936", by Herbert Marshall, B.A., F.S.S., Chief of the Internal Trade Branch of the Dominion Bureau of Statistics. These reports include explanatory data on the methods followed in computing these statistics.

balance of a nation's trade can only be known when not only the commodity items are considered, but also the 'invisible' items such as interest, freight, immigrant remittances, financial services, tourist traffic, etc. In short, all debit and credit transactions must be set down in order to find out the true balance. If all the visible and invisible items are thus tabulated the debit or credit difference will be a final invisible item—capital import or export—and this will bring the nation's trade account into a state of balance.* Thus, the commodity trade balance of a country cannot be understood by itself, but only as it is interpreted in the light of the invisible items of a country's international transactions. In the light of such data, it will be found that a so-called favourable or unfavourable balance will mean an entirely different thing at different times in a country's history. The balance of international payments, which takes account not only of commodity trade but of all transactions, reveals the meaning of the trade balance. It shows, for example, that in 1920, 1921, and 1922 our international accounts were balanced by large imports of capital, although our commodity trade balance was favourable in 1920 and 1922. During these years Britain repaid us war funds as follows: 1920, \$104,000,000; 1921, \$128,000,000; 1922, \$84,000,000. From 1923-28, however, the international accounts show a credit balance after allowing for interest payments and maturities, thus denoting capital exports. In these years Canada became, temporarily, a capital-exporting country and, therefore, the explanation of our favourable commodity trade balance was quite different from that for the period 1894 to 1903, when it was explained by payments of interest and maturities.

From the foregoing it will be seen that an estimated balance of international payments is indispensable to the understanding of trade accounts. It has, however, a great many other important uses, among which the following may be mentioned: (1) to give a comprehensive picture of our international debits and credits and how they are balanced; (2) to show the extent of our international borrowings and lendings; (3) to show the magnitude of individual invisible items, such as interest, freights, tourist traffic, etc., in our international transactions; (4) to explain exchange disturbances and the effect of international financial difficulties; and (5) to furnish data for guidance in the formulation of international fiscal, financial, and commercial policy.

The Dominion Bureau of Statistics has recently completed a comprehensive study of the Canadian balance of international payments between 1926 and 1936 and it is, consequently, now possible to draw up for this period revised statements of the balance of payments which incorporate new information that has become available.†

Of special importance are the data that have been collected on the movement of capital between Canada and other countries during the period. These movements of capital have been analyzed in detail and presented in the capital account. Viewing the period as a whole, one of the more outstanding results of Canada's international capital transactions has been the extent to which outward movements of capital have offset inward movements. In the ten years between 1927 and 1936 Canadian governments and corporations received \$1,978,600,000 from the sale of

*It is impossible to obtain absolute completeness and accuracy in estimates of invisible items; hence, part of the difference will be due to errors and omissions.

†"The Canadian Balance of International Payments, 1926-1936", published by and obtainable from the Dominion Bureau of Statistics.

bonds abroad, while during the same years they paid off \$1,801,900,000 of bonded obligations, so that the net capital receipts from their borrowings abroad during the decade were only \$176,700,000. At the same time, large sums were remitted from Canada for the purchase of United States, Latin-American, and other foreign securities, for the repurchase of Canadian securities, and in connection with capital repayments and other financial transactions of trust companies, international branch plants, etc. In the earlier years of the period there was a considerable inward movement of capital in connection with the repatriation of Canadian banking assets held abroad.

Current and Capital Transactions in 1935 and 1936.—In each of the years 1935 and 1936, Canada's current and capital transactions with other countries had many features in common. Both years were characterized by large credit balances in the current account accompanied by substantial outward movements of capital. The principal sources of the credits in the current account, which summarizes international transactions in goods, gold, and services, were the growing credit balances derived in these years from the expansion of Canada's export trade, from larger sales of gold to other countries and from the increasing expenditures in Canada of tourists from other countries. External credits derived from these transactions were more than sufficient to make the customary large net payments of interest and dividends to residents of other countries as well as the net payments to other countries arising out of other international service transactions. Taking all such current payments abroad into account there remained surplus credits in the current account of \$176,900,000 and \$309,000,000, respectively, in 1935 and 1936.

The capital account shows how the surplus external credits in the current account were employed as well as giving a detailed analysis of the various types of capital movement between Canada and other countries in these years. The net outward movements of capital in 1935 and 1936 which have been traced in the capital account were \$173,300,000 and \$253,700,000, respectively. In each year a feature of the outward movement of capital was the large volume of Canadian securities owned abroad which were redeemed, and in both years these amounts of maturing and called bonds exceeded by far the amounts of new Canadian issues sold abroad, with consequent substantial reductions in Canada's liabilities to other countries. A long-run consequence of these large scale redemption operations will be the future reductions in Canada's interest payments to non-resident bondholders. The purchases and sales of securities between Canada and other countries were the source of net credits in each year, although in 1936 purchases from other countries were not far short of sales. There were substantial outflows of capital funds in each year as a consequence of international insurance transactions and of the international transactions of Canadian trust companies, the operations of British and foreign branch plants in Canada, and the branch activities in other countries of Canadian companies.

Table 24 shows estimates of the balance of international payments for 1935 and 1936. Figures for earlier years back to 1920 may be found in the 1929 and later Year Books, but, as indicated on p. 588, the balances since 1926 have recently been the subject of comprehensive study and revision, and, for the revised figures for these years, the interested reader is referred to the special report mentioned in footnotes to pp. 587 and 588.

24.—Estimated Balance of International Payments, 1935 and 1936.

NOTE.—If the estimates of the current and capital items below were absolutely correct and all inclusive, the balancing item of the current account and the balancing item of the capital account would be equal. The difference between these two amounts in the statement represents either errors in the computations or the omission of transactions which could not be traced at the time the tables were prepared. Figures for both years are subject to revision. Corresponding figures for earlier years back to 1926 may be found in the report "The Canadian Balance of International Payments, 1926-1936", issued by the Dominion Bureau of Statistics.

Item.	1935.			1936.		
	CREDITS— Exports, Visible and Invisible.	DEBITS— Imports, Visible and Invisible.	Net Credits (+) or Debits (-).	CREDITS— Exports, Visible and Invisible.	DEBITS— Imports, Visible and Invisible.	Net Credits (+) or Debits (-).
Current Account of Goods, Services and Gold.	\$'000,000	\$'000,000	\$'000,000	\$'000,000	\$'000,000	\$'000,000
Commodity Trade—						
Recorded merchandise exports and imports.....	743.3	550.3		957.4	635.2	
Unrecorded imports of ships.....	—	0.5		—	0.3	
	743.3	550.8		957.4	635.5	
Deductions for settlers' effects and other non-commercial exports and imports.....	3.4	8.2		3.6	9.1	
	739.9	542.6		953.8	626.4	
Correction for over-valuation of imports	—	1.1		—	1.7	
	739.9	541.5		953.8	624.7	
Minus gold-bearing quartz and bullion from exports and plus silver and other coin on imports.....	4.3	1.4		5.9	1.0	
Corrected totals of commodity trade..	735.6	542.9	+192.7	947.9	625.7	+322.2
Gold Exports and Imports— ¹						
Non-monetary.....	116.7	—	+116.7	132.0	1.0	+131.0
Monetary.....	Nil	Nil	—	Nil	Nil	—
Totals, Gold.....	116.7	—	+116.7	132.0	1.0	+131.0
Freight receipts and payments, <i>n.o.p.</i>	68.2	82.3	— 14.1	80.2	98.0	— 17.8
Tourist expenditures.....	214.8	95.6	+119.2	248.8	107.4	+141.4
Interest and dividend receipts and payments.....	62.0	270.6	—208.6	76.2	310.0	—233.8
Immigrants' remittances.....	6.3	15.0	—8.7	7.1	18.0	—10.9
Government receipts and expenditures..	5.6	10.9	—5.3	6.5	11.0	—4.5
Charitable and missionary contributions	1.0	2.0	—1.0	1.0	2.0	—1.0
Advertising transactions.....	1.7	1.4	+0.3	1.8	1.4	+0.4
Motion picture remittances.....	Nil	3.2	—3.2	Nil	3.5	—3.5
Capital of immigrants and emigrants....	1.7	3.1	—1.4	1.7	3.1	—1.4
Earnings of Canadian residents employed in U.S.A. and U.S. residents employed in Canada.....	3.8	1.5	+2.3	3.6	1.7	+1.9
Net payments for entertainment services, royalties, etc., not included above.....	—	12.0	—12.0	—	15.0	—15.0
Totals, Current Account.....	1,217.4	1,040.5	+176.9	1,506.8	1,197.8	+309.0
Capital Account.						
New Issues of Canadian securities (par value).....	117.1	—		110.1	—	
Commissions and discounts.....	4.0	—		4.0	—	
Net New Issues.....	113.1	—	+113.1	106.1	—	+106.1
Retirements of Canadian securities (including maturities and redemptions)...	—	267.5	—267.5	—	270.0	—270.0
Purchases and sales of outstanding securities.....	301.8	250.8	+51.0	422.5	414.7	+7.8
Net capital transactions of international branch plants, etc. ²	—	52.2	—52.2	—	74.2	—74.2
Insurance transactions, <i>n.o.p.</i>	20.0	38.0	—18.0	19.0	45.0	—26.0
Net change in estimated net assets of Canadian banks outside Canada.....	0.1	—	+0.1	2.6	—	+2.6
Totals, Capital Account.....	435.0	608.5	—173.5³	550.2	803.9	—253.7³

¹ All gold coin and bullion exported and imported, including exports of gold-bearing quartz and 'earmarked' gold.

² Included in this item are the net movements of funds resulting from the operations of the branches, subsidiaries, etc. of British and foreign companies in Canada, subsidiaries, etc. of Canadian companies operating outside of Canada and the net movements of funds resulting from the international transactions of Canadian trust companies. Although the more important current transactions of these concerns, such as dividends, have been included in the current account, various small items of current transactions which are difficult to segregate, remain in this item.

³ Direct estimate of net outflow of capital.

CHAPTER XVII.—INTERNAL TRADE.

This treatment of trade within the Dominion commences with a general statement on interprovincial trade, followed by sections dealing with the statistics of the grain trade and of the marketing of live stock and animal products. Statistics of cold storage facilities and of commodities in cold storage are next in order. Following these will be found sections relating to various administrative services connected with trade, including: the payment of bounties; the granting of patents, copyrights and trade marks; weights and measures; and electricity and gas inspection. Section 9 deals with the statistics of wholesale and retail merchandising and of various types of service establishments. The concluding section of the chapter contains a brief treatment of the control and sale of alcoholic liquors and beverages in Canada.

Section 1.—Interprovincial Trade.*

Canada may be divided into the following five economic regions, each deriving its specific character from the predominant occupations of its people:—

1. *The Eastern Fishing, Lumbering, and Mining Region*, comprising the river valley and gulf of the St. Lawrence, together with the Atlantic coast; in other words, the greater part of the Maritime Provinces, the northern part of the province of Quebec (excluding the former district of Ungava), and a portion of northern Ontario.

2. *The Eastern Agricultural and Industrial Region*, comprising the cultivated portions of the Maritime Provinces and of the provinces of Quebec and Ontario. In the latter provinces the cultivated areas extend along the banks of the St. Lawrence and its tributaries.

3. *The Central Agricultural Region*, extending from the Red River valley to the Rocky mountains and from the Canada-United States boundary to about 56° N. lat.

4. *The Western Fishing, Mining, and Lumbering Region*, comprising the western portion of the province of Alberta, the whole of British Columbia and the southern portion of Yukon.

5. *The Northern Fishing, Mining, and Hunting Region*, extending from the regions of permanent settlement northwards, and from the boundary of Labrador to the Pacific and to the Alaskan boundary. This vast region is sparsely inhabited by indigenous nomadic tribes engaged in fishing and hunting for their own support or for exchange with the fur-trading companies, and with individual whalers and traders who visit the region. In recent years mining activity has been developing in this region, especially along its southern fringe and in the basin of the Mackenzie river.

Great differences exist between the products of these various regions; even the fisheries and lumber products of the East are quite distinct from those of British Columbia. The needs of the people throughout the country are met to a great extent by the exchange of the products of one region for those of another.

Interprovincial trade in what is now Canada had its beginning, many years before Confederation, in the exchange of the furs and lumber products of Upper and Lower Canada for the fisheries and mineral products of the Maritimes. Although a large part of British Columbia lumber, minerals, fish, and fruits, Prairie Provinces agricultural products, Ontario minerals, Quebec wood-pulp, paper, asbestos, and Maritime Provinces lumber, potatoes, fruit, and fish are exported to foreign countries

*Revised by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch, Dominion Bureau of Statistics.

and the central manufacturing provinces import the greater part of their coal, there is a large trade of manufactured and raw materials between the economic regions of the Dominion. This trade is carried principally on the railways and, to a lesser extent, on the St. Lawrence river and Great Lakes and in late years an increasing amount is being carried by motor trucks.

Monthly railway traffic reports and an annual summary report are published by the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics showing, for each province and for the Dominion as a whole, the total *revenue* freight traffic of all railways, divided into 76 classes of commodities. The data also show the quantity of each class that originated and terminated in each province, and are of use in computing the net imports and exports of each province for each of the 76 classes of commodities. These statistics show rail traffic only, a limitation which should be borne in mind in connection with the trade of provinces having water transportation. Summary figures for all commodities are given in Table 1. The totals, however, give no indication of how the imports of manufactures are offset by the exports of grain, coal, etc., in particular provinces. Such analyses are possible only from the detailed data.

The revenue freight traffic movement on the steam railways of Canada fluctuates to a certain extent with the yield of the crops and with activity in the mining and construction industries involving heavy movements of low-grade freight. The general trend from 1921 to 1928 was upward, increasing from 83,814,436 tons of freight carried in 1921 to 119,227,758 tons in 1928. In 1929, however, a decrease to 114,600,778 tons was reported and, with the industrial depression, there were still greater decreases to 57,099,111 tons in 1933, but traffic began to improve during the last six months of 1933 and each month of 1934 showed an increase over the corresponding month of 1933 and the total for the year was 18 p.c. greater than for 1933. The rate of increase was reduced somewhat during the first half of 1935 but there was a fairly steady increase thereafter, the total tonnage moved during 1936 being 9.5 p.c. heavier than in 1935 and during the first eleven months of 1937 being also 9.5 p.c. above that for the eleven months of 1936.

1.—Railway Revenue Freight Traffic Movement in Canada, by Provinces, calendar years 1935 and 1936.

Province.	Originating in Canada or Specified Province.		Received from Foreign Connections.		Totals, Freight Originating. ¹	
	1935.	1936.	1935.	1936.	1935.	1936.
	tons.	tons.	tons.	tons.	tons.	tons.
Prince Edward Island.....	231,013	186,392	176	396	231,189	186,788
Nova Scotia.....	6,123,028	6,643,220	120,271	137,972	6,243,299	6,781,192
New Brunswick.....	1,731,056	1,849,825	384,171	423,327	2,115,227	2,273,152
Quebec.....	7,756,547	8,530,254	2,903,861	3,157,279	10,660,408	11,687,533
Ontario.....	14,153,264	16,444,910	14,225,258	16,024,858	28,378,522	32,469,768
Manitoba.....	3,584,771	3,926,548	143,142	163,103	3,727,913	4,089,651
Saskatchewan.....	5,719,438	6,200,044	185,934	299,565	5,905,372	6,499,609
Alberta.....	7,247,605	6,969,960	237,223	216,081	7,484,828	7,186,041
British Columbia.....	3,824,218	3,881,847	297,839	454,365	4,122,057	4,336,212
Totals.....	50,370,940	54,633,000	18,497,875	20,876,946	68,868,815	75,509,946

For footnote, see end of table, p. 593.

1.—Railway Revenue Freight Traffic Movement in Canada, by Provinces, calendar years 1935 and 1936—concluded.

Province.	Terminating in Canada or Specified Province.		Delivered to Foreign Connections.		Totals, Freight Terminating. ¹	
	1935.	1936.	1935.	1936.	1935.	1936.
	tons.	tons.	tons.	tons.	tons.	tons.
Prince Edward Island.....	275,971	226,138	8,221	20,345	284,192	246,483
Nova Scotia.....	5,262,485	5,769,873	594,684	564,372	5,857,169	6,334,245
New Brunswick.....	1,537,664	1,641,684	1,056,853	1,237,343	2,594,517	2,879,027
Quebec.....	6,379,204	6,637,175	3,709,109	4,831,509	10,088,313	11,468,684
Ontario.....	19,598,621	21,580,190	13,858,811	15,992,631	33,457,432	37,572,821
Manitoba.....	3,740,491	3,824,358	271,614	325,766	4,012,165	4,150,124
Saskatchewan.....	3,391,342	3,452,747	293,042	268,312	3,684,384	3,721,059
Alberta.....	2,683,434	2,595,458	549	4,452	2,683,983	2,599,910
British Columbia.....	2,797,517	2,756,833	2,514,399	2,961,826	5,311,916	5,718,659
Totals.....	45,666,729	48,484,456	22,307,282	26,206,556	67,974,011	74,691,012

¹The freight originating and that terminating will not agree because that which originates within a certain year does not all terminate within the same year. On the other hand, some which terminated in 1935, for instance, originated within the previous year.

Section 2.—Grain Trade Statistics.*

The Canada Year Book, 1922-23, contained on pp. 581-583 a historical summary of the more important points respecting the shipment, inspection, and sale of Canadian grain under the Canada Grain Act, and an outline of the Canada Grain Act of 1925 appeared at p. 1017 of the 1925 Year Book. The 1929 amendments were dealt with at pp. 1047-1048 of the 1930 Year Book, and the Canada Grain Act, 1930, at p. 1101 of the 1931 Year Book.

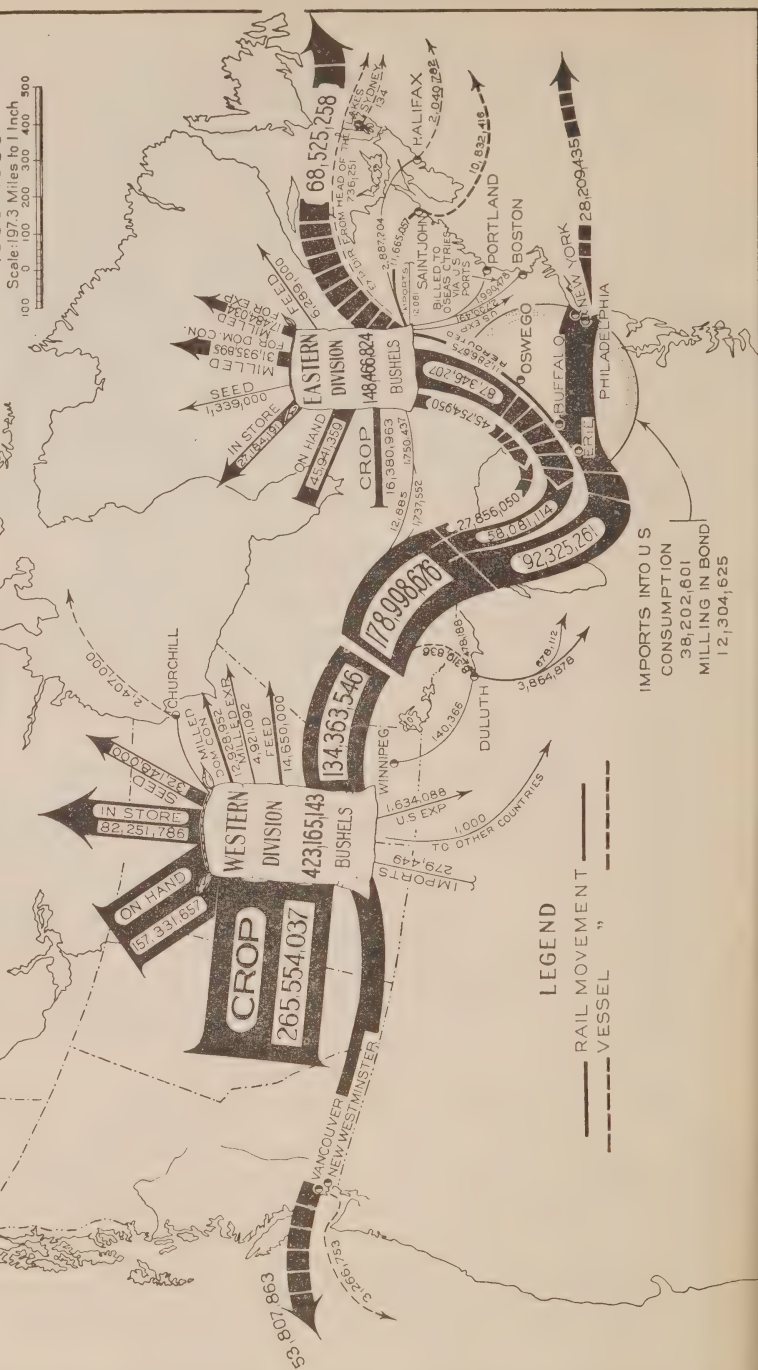
Board of Grain Commissioners.—This Board was established in 1912 under the authority of the Canada Grain Act (c. 27, 1912). It assumed functions in regulation of the grain trade which were formerly carried out under the Manitoba Grain Act and the Inspection and Sale Act. The Board consists of a Chief Commissioner and not more than two Commissioners, appointed by the Governor in Council for periods of ten years. The chief offices of the Board are located in Winnipeg.

The Board is responsible for the administration of the provisions of the Canada Grain Act and its functions relate to: the grading and weighing of grain; deductions from grain for dockage; shortages appearing upon the delivery of grain into or out of any elevator; the unfair or discriminatory operation of any elevator; the deterioration of grain during storage or treatment; and any other provisions of the Act, or regulations made or licences granted thereunder.

Movement of Canadian Wheat, Crop Year 1936-37.—A résumé of the Canadian wheat movement naturally begins with a description of the crop of the Western Inspection Division. The wheat crop of 1936 marketed in the Western Division during the crop year from Aug. 1, 1936, to July 31, 1937, amounted to 203.5 million bushels. A carry-over of 82.2 million bushels from the previous crop year, together with some minor items, brought the stock of the Western Division to a total for the year of 286.0 million bushels. As for distribution, 200.9 million bushels were commercially disposed of, the chief items of which were 66.9 million bushels exported to the United Kingdom and 93.8 million bushels shipped to the Eastern Division. The direct exports to the United States were 13.1 million bushels and to other countries 10.9 million bushels. The total shipments from the Western

*Revised under the direction of Dr. T. W. Grindley, Chief, Agricultural Branch, Dominion Bureau of Statistics.

Scale: 197.3 Miles to 1 Inch



Division were thus 184·7 million bushels. The wheat used by the milling companies for the manufacture of flour amounted to about 16·1 million bushels, of which 12·5 million bushels were ground into flour for domestic consumption. The all-rail movement eastward from the Western Division, including shipments to the Ogilvie Flour Mills Co. at Fort William for grindings, was 1,160·8 thousand bushels. Lake shipments from Fort William and Port Arthur were 141·4 million bushels, 92·4 million bushels going to Canadian ports and 48·3 million to United States ports. The principal Canadian lake ports were those of lake Huron and Georgian bay, with receipts of 25·0 million bushels, and Port Colborne with 27·1 million bushels. Among the United States lake ports, Buffalo was of chief importance in the handling of Canadian wheat, with receipts by water from Port Arthur and Fort William of 35·3 million bushels. The export of wheat through Vancouver was 31·7 million bushels, as compared with 52·8 million in the previous crop year; 2·0 million bushels were exported through New Westminster, and 4·2 million from Churchill. The seed requirements were estimated at 32·4 million bushels, feed for live stock and poultry at 9·3 million bushels, and the stocks at the end of the crop year were 25·2 million bushels.

The Eastern Division received during the crop year not only the eastern crop, estimated at 15·7 million bushels, but also shipments from the West aggregating 93·8 million bushels. The quantity on hand at the beginning of the crop year was 25·8 million bushels, making, with a comparatively small importation from the United States, a total stock entering the Eastern Division of 135·4 million bushels. The distribution included 7·5 million bushels carried over in store into the following year, 71·9 million bushels exported from the St. Lawrence ports, and 10·5 million bushels shipped through the winter ports of Saint John and Halifax, while 1·7 million bushels moved over the border into the United States for consumption. In addition, 39·2 million bushels were cleared for export to the United Kingdom and other countries *via* the United States Atlantic ports. The chief ports concerned with the movement of Canadian grain from both Divisions were New York, Albany, Boston, and Portland.

Total exports from Canada to the United States for consumption amounted to 14·8 million bushels, to the United Kingdom 124·3 million bushels, to other countries 35·6 million bushels; 123·9 million bushels were shown to be shipped *via* Canadian ports and 136·0 million bushels *via* United States ports, after deducting 3·1 million bushels transhipped from Buffalo to Montreal and adding the same to the Canadian movement. Total exports of wheat from Canada during the crop year amounted to 174·8 million bushels.

Table 3 shows, for the licence years 1936 and 1937, the number of elevators and their total storage capacity, the figures being given by provinces for each class of elevator, with a summary showing the total of all elevators for each province. The growth of Canadian elevators in number and capacity has accompanied the expansion of grain acreage in the present century. Canadian elevators in 1901 numbered 426 with a capacity of 18,329,352 bushels; in 1911 these had increased to 1,909 elevators and 105,462,700 bushels; and totals of 3,855 elevators and 231,213,620 bushels were reached in 1921. Further increases in the past few years have resulted in a total of 5,856 elevators with a capacity of 421,855,620 bushels in 1937.

Table 4 gives a summary of the inspections of grain, 1934-37. Detailed statistics may be found in the Reports on the Grain Trade of Canada,* Tables 5 and 6 show the shipments of grain by vessel and rail for 1936 and 1937 and Tables 7 and 8 deal with the Canadian grain handled in recent years at Eastern elevators.

*The latest report is for the crop year ended July 31, 1936, and may be obtained from the Dominion Statistician.

2.—Summary of the Distribution of Canadian Grain, crop year ended July 31, 1937.

Item.	Wheat.	Oats.	Barley.	Flax.	Rye.
	bu.	bu.	bu.	bu.	bu.
1. On Hand, Aug. 1, 1936—					
In farmers' hands.....	5,520,000	31,186,000	4,199,200	7,600	270,600
In Eastern elevators.....	22,368,381	1,198,655	761,969	Nil	367,111
In flour-mills and mill elevators, Western Division.....	5,481,979	1,143,856	1,393,244	9,819	39,515
In interior terminals, Western Division...	589,027	496,528	61,957	26	170
In Vancouver and New Westminster elevators.....	7,709,229	329,086	19,221	309	12,464
In Victoria and Prince Rupert elevators..	1,027,676	Nil	Nil	Nil	Nil
In Churchill elevator.....	2,478,657	Nil	Nil	Nil	Nil
In country and private terminals, Western Division.....	30,760,751	3,017,646	1,564,385	99,722	1,038,027
In public and private terminals, Fort William and Port Arthur.....	25,485,743	1,697,639	1,271,448	136,205	1,341,627
In Eastern Division—afloat.....	2,488,013	389,066	165,781	Nil	Nil
In flour-mills, Eastern Division.....	1,728,255	299,981	24,292	90	14,225
In transit.....	2,456,566	546,240	366,134	15,516	110,630
Totals on Hand.....	108,094,277	40,304,697	9,827,631	269,287	3,194,369
2. Crops, 1936.....	219,218,000	271,778,000	71,922,000	1,795,300	4,281,000
3. Shipped in from U.S.A. and other countries.....	403,396	24,257	3,381	991,007	6,038
4. Totals, annual stocks (sum of 1, 2, and 3).....	327,715,673	312,106,954	81,753,012	3,055,594	7,481,407
5. Shipped Out to—					
U.S.A.....	14,868,352	229,332	15,082,377	4,075	1,315,693
United Kingdom.....	124,368,897	4,618,117	2,322,318	165,055	982,110
Other countries.....	35,620,911	1,149,913	151,138	9,338	1,335,229
Totals Shipped Out.....	174,858,160	5,997,362	17,555,833	178,468	3,633,032
6. Milled—					
For domestic consumption.....	43,549,047	7,743,790	1,049,617	1,785,000	78,657
For export.....	20,365,493	3,502,533	Nil	Nil	1,420
Consumed in malting and brewing establishments.....	Nil	Nil	5,850,000	Nil	Nil
7. Totals disposed of commercially (sum of 5 and 6).....	238,772,700	17,243,685	24,455,450	1,963,468	3,713,109
8. Feed for live stock and poultry.....	15,794,000	Nil	Nil	Nil	Nil
9. Used for seed.....	34,112,000	32,621,250	8,662,800	120,650	1,340,550
10. In Store, July 31, 1937—					
In farmers' hands.....	3,999,300	15,231,000	1,476,400	9,800	78,400
In Eastern elevators.....	5,980,927	395,986	341,030	2,115	5,394
In Eastern Division—afloat.....	2,275,436	338,598	509,970	24,776	133,058
In flour-mills and mill elevators, Western Division.....	3,991,401	681,487	778,092	30,269	5,170
In interior terminals, Western Division.....	34,539	39,240	3,633	Nil	Nil
In Vancouver and New Westminster elevators.....	3,414,592	79,363	8,001	418	1,227
In Victoria and Prince Rupert elevators.....	911,340	Nil	Nil	Nil	Nil
In Churchill elevator.....	614,569	Nil	Nil	Nil	Nil
In country and private terminals, Western Division.....	3,401,452	674,703	189,064	82,527	65,598
In public and private terminals, Fort William and Port Arthur.....	6,811,752	508,913	958,743	312,154	98,544
In transit.....	533,951	114,333	10,092	2,842	19,595
In flour-mills, Eastern Division.....	770,593	215,185	88,210	66	2,716
Totals in Store.....	32,739,852	18,278,808	4,363,235	464,967	409,702

2.—Summary of the Distribution of Canadian Grain, crop year ended July 31, 1937 —concluded.

Item.	Wheat.	Oats.	Barley.	Flax.	Rye.
	bu.	bu.	bu.	bu.	bu.
11. Totals accounted for (sum 7, 8, 9, and 10).....	321,418,552	68,143,743	37,481,485	2,428,435	4,122,811
12. Losses in cleaning.....	2,500,000	150,000	50,000	100,000	20,000
13. Grain, not merchantable.....	1,515,500	8,509,000	832,200	15,900	23,500
14. Balances, merchantable grain fed on farms or otherwise consumed in, and moved out of, Canada through other channels.....	2,281,621	235,304,211	43,389,327	511,159	3,315,096
15. Totals (sum of 11 to 14).....	327,715,673	312,106,954	81,753,012	3,055,594	7,481,407
16. Amounts inspected.....	182,794,400	24,853,767	22,659,755	1,331,400	2,484,008
17. Percentages inspected.....	83.4	9.1	31.5	74.2	58.6
18. Percentages of commercial grain inspected (line 16 of 11).....	57.4	36.3	60.5	54.8	60.3
19. Commercial grain from season's crop (10 and 7-1-3).....	163,014,879	—4,806,461	18,987,673	1,168,141	922,374
20. Percentages of crop commercial grain (line 19 of 2).....	74.4	—	26.4	65.1	21.5
21. Values of crop.....\$	205,327,000	116,267,000	49,512,000	2,588,000	2,980,000

3.—Numbers and Storage Capacities of Canadian Grain Elevators, licence years 1936 and 1937.

NOTE.—Detailed statistics of elevators for the years 1901 to 1918 are given in the 1921 Year Book, pp. 507-509, and the figures for later years will be found in successive Year Books.

Division, Elevator, and Province.	1936.		1937.	
	Elevators.	Capacity.	Elevators.	Capacity.
	No.	bu.	No.	bu.
WESTERN DIVISION.				
Country Elevators—				
Ontario.....	1	40,000	1	40,000
Manitoba.....	710	22,522,150	705	22,343,650
Saskatchewan.....	3,232	101,216,150	3,222	100,850,850
Alberta.....	1,762	65,404,500	1,756	65,268,000
British Columbia.....	13	425,000	14	485,000
Totals, Country Elevators.....	5,718	189,607,800	5,698	188,987,500
Private Country Elevators—				
Manitoba.....	5	232,000	4	105,000
Saskatchewan.....	2	55,000	3	90,000
Alberta.....	4	137,000	4	180,000
Totals, Private Country Elevators.....	11	324,000	11	375,000
Mill Elevators—				
Ontario.....	1	180,000	1	180,000
Manitoba.....	4	152,500	4	152,500
Saskatchewan.....	8	133,000	9	148,000
Alberta.....	3	63,000	3	63,000
British Columbia.....	12	468,110	15	451,110
Totals, Mill Elevators.....	28	996,610	32	994,610
Private Terminal Elevators—				
Ontario.....	6	1,890,000	6	1,890,000
Manitoba.....	10	4,006,000	11	4,254,000
Saskatchewan.....	6	4,560,500	5	4,410,500
Alberta.....	14	4,090,000	15	4,610,000
British Columbia.....	2	570,000	4	630,000
Totals, Private Terminals.....	38	15,116,500	41	15,794,500

3.—Numbers and Storage Capacities of Canadian Grain Elevators, licence years 1936 and 1937—concluded.

Division, Elevator, and Province.	1936.		1937.	
	Elevators.	Capacity.	Elevators.	Capacity.
	No.	bu.	No.	bu.
WESTERN DIVISION—concluded.				
Public Terminal Elevators—				
Saskatchewan.....	2	11,000,000	2	11,000,000
Alberta.....	3	6,250,000	3	6,250,000
British Columbia.....	1	1,715,000	1	1,715,000
Totals, Public Terminals.....	6	18,965,000	6	18,965,000
Semi-Public Terminal Elevators—				
Ontario.....	27	92,542,210	26	91,167,210
Manitoba.....	2	3,500,000	2	3,500,000
Alberta.....	1	520,000	Nil	—
British Columbia.....	9	19,158,000	9	19,158,000
Totals, Semi-Public Terminals.....	39	115,720,210	37	113,825,210
Totals, Western Division.....	5,840	340,730,120	5,825	338,941,820
EASTERN DIVISION.				
Eastern Elevators—				
Nova Scotia.....	1	2,200,000	1	2,200,000
New Brunswick.....	3	3,076,800	3	3,076,800
Quebec.....	8	22,537,000	9	25,537,000
Ontario.....	18	52,100,000	18	52,100,000
Totals, Eastern Division.....	30	79,913,800	31	82,913,800
SUMMARY BY PROVINCES.				
Nova Scotia.....	1	2,200,000	1	2,200,000
New Brunswick.....	3	3,076,800	3	3,076,800
Quebec.....	8	22,537,000	9	25,537,000
Ontario.....	53	146,752,210	52	145,377,280
Manitoba.....	731	30,312,650	726	30,355,150
Saskatchewan.....	3,250	116,964,650	3,241	116,499,350
Alberta.....	1,787	76,464,500	1,781	76,371,000
British Columbia.....	37	22,336,110	43	22,439,110
Grand Totals for Canada.....	5,870	420,643,920	5,856	421,855,620

4.—Quantities of Canadian Grain Inspected during the crop years ended July 31, 1934-37.

Grain.	1933-34.			1934-35.		
	Western Division.	Eastern Division.	Total.	Western Division.	Eastern Division.	Total.
	bu.	bu.	bu.	bu.	bu.	bu.
Spring wheat.....	228,014,700	4,000	228,018,700	231,027,500	25,000	231,052,500
Winter wheat.....	107,280	75,000	182,280	502,500	113,000	615,500
Totals, Wheat.....	228,121,980	79,000	228,200,980	231,530,000	138,000	231,668,000
Oats.....	31,520,720	102,137	31,622,857	28,195,000	1,247,453	29,442,453
Barley.....	13,413,400	7,500	13,420,900	14,840,000	1,092,292	15,932,292
Flax.....	351,820	Nil	351,820	429,000	Nil	429,000
Rye.....	1,306,965	Nil	1,306,965	1,021,500	4,000	1,025,500
Corn.....	—	—	Nil	Nil	86,400	86,400
Buckwheat.....	2,000	268,582	270,582	Nil	428,325	428,325
Screenings.....	38,000	Nil	38,000	—	—	Nil
Mixed grain.....	211,665	6,097	217,762	132,500	216,304	348,804
Totals, Grain.....	274,966,550	463,316	275,429,866	276,148,000	3,212,774	279,360,774

4.—Quantities of Canadian Grain Inspected during the crop years ended July 31, 1934-37—concluded.

Grain.	1935-36.			1936-37.		
	Western Division.	Eastern Division.	Total.	Western Division.	Eastern Division.	Total.
	bu.	bu.	bu.	bu.	bu.	bu.
Spring wheat.....	217,620,910	375,243	217,996,153	182,102,040	Nil	182,102,040
Winter wheat.....	519,090	1,290,817	1,809,907	110,960	581,450	692,410
Totals, Wheat.....	218,140,000	1,666,060	219,806,060	182,213,000	581,450	182,794,450
Oats.....	25,008,500	2,411,027	27,419,527	24,302,000	551,767	24,853,767
Barley.....	14,745,000	337,900	15,082,900	21,849,360	810,395	22,659,755
Flax.....	880,000	Nil	880,000	1,331,400	Nil	1,331,400
Rye.....	1,958,500	12,000	1,970,500	2,255,900	3,000	2,258,900
Corn.....	9,600	474,000	483,600	1,000	119,250	120,250
Buckwheat.....	Nil	280,280	280,280	1,000	107,629	108,629
Sample grain.....	Nil	37,732	37,732	—	—	Nil
Mixed grain.....	91,000	115,172	206,172	239,480	16,700	256,180
Totals, Grain.....	260,832,600	5,334,171	266,166,771	232,193,140	2,190,191	234,383,331

5.—Shipments of Grain by Vessels from Fort William and Port Arthur for the navigation seasons 1936 and 1937.

Grain.	1936.			1937.		
	To Canadian Ports.	To U.S. Ports.	Total Shipments.	To Canadian Ports.	To U.S. Ports.	Total Shipments.
Wheat..... bu.	89,581,223	76,084,090	166,809,142 ¹	75,228,159	13,724,564	89,230,891 ²
Oats..... “	11,818,939	124,638	11,943,577	5,938,343	Nil	5,938,343
Barley..... “	7,257,733	12,519,246	19,776,979	13,079,796	3,040,588	16,120,384
Flaxseed..... “	404,928	165,055	569,983	401,417	Nil	401,417
Rye..... “	1,099,819	3,284,212	4,565,082 ¹	1,536,721	142,520	1,679,241
Totals..... “	110,162,642	92,177,241	203,604,763 ¹	96,184,436	16,907,672	113,370,276
Screenings..... ton.	11,188	52,656	63,844	7,090	26,037	33,127
Mixed feed (oats groats) “	484	Nil	484	150	Nil	150
Barley malt..... lb.	9,363,170	Nil	9,363,170	16,387,800	Nil	16,387,800

¹Includes 1,143,829 and 181,051 bushels of wheat and rye, respectively, exported direct to Europe.

²Includes 278,168 bushels of wheat exported direct to Europe.

6.—Shipments of Grain by Lake and All-Rail Routes from Fort William and Port Arthur for the crop years ended July 31, 1936 and 1937.

Grain.	1935-36.			1936-37.		
	Lake.	Rail.	Total.	Lake.	Rail.	Total.
Wheat—	bu.	bu.	bu.	bu.	bu.	bu.
No. 1 Hard.....	7,727,275	2,310	7,729,585	2,559,778	5,000	2,564,778
No. 1 Northern.....	66,554,431	133	66,554,564	72,209,800	228,387	72,438,187
No. 2 Northern.....	15,988,719	699	15,989,418	19,026,153	68,022	19,094,175
No. 3 Northern.....	18,631,374	2,068	18,633,442	16,986,885	316,991	17,303,876
No. 4.....	18,996,980	8,721	19,005,701	9,498,117	12,817	9,510,934
Old grade No. 2 Northern.	11,088,390	Nil	11,088,390	—	—	Nil
Other grades.....	39,664,811	225,031	39,889,842	21,549,636	550,484	22,100,120
Totals, Wheat.....	178,651,980	238,962	178,890,942	141,830,369	1,181,701	143,012,070
Other Grain—						
Oats.....	14,704,062	1,766,570	16,470,632	10,194,982	2,353,453	12,548,435
Barley.....	9,504,885	249,170	9,754,055	18,545,591	196,830	18,742,421
Flaxseed.....	528,010	109,096	637,106	619,248	176,050	795,298
Rye.....	2,752,734	2,850	2,755,584	3,501,236	9	3,501,245
Mixed grain ¹	14,021	39,153	53,174	5,108	63,160	68,268
Totals, Other Grain....	27,503,712	2,166,839	29,670,551	32,866,165	2,789,502	35,655,667

¹ Mixed grain in bushels of 50 lb.

7.—Canadian Grain Handled at Eastern Elevators, by crop years ended July 31, 1930-37.

NOTE.—Figures for the crop years 1922 to 1929 are shown at p. 626 of the 1931 edition of the Year Book.

Year.	Wheat.	Oats.	Barley.	Flaxseed.	Rye.	Total Grain.
	bu.	bu.	bu.	bu.	bu.	bu.
Receipts and Carry-over—						
1929-1930.....	132,356,863	15,932,469	8,381,291	658,303	3,226,137	160,555,063
1930-1931.....	178,120,479	20,874,442	37,555,371	1,710,059	6,226,473	244,486,824
1931-1932.....	151,395,023	17,063,934	17,109,737	1,012,939	15,210,866	201,792,499
1932-1933.....	233,419,639	17,367,890	7,797,343	1,116,223	3,921,887	263,622,982
1933-1934 ¹	164,248,854	17,949,649	7,496,255	631,973	337,076	191,163,807
1934-1935 ¹	116,415,429	10,851,457	10,045,694	485,990	933,244	138,731,814
1935-1936 ¹	164,427,961	20,967,752	14,403,239	582,309	2,033,088	202,414,349
1936-1937 ¹	161,828,565	12,273,485	6,247,592	586,734	2,444,583	183,380,959
Shipments—						
1929-1930.....	111,077,966	13,372,999	6,734,676	657,101	1,654,237	133,496,979
1930-1931.....	163,730,581	19,086,592	36,485,055	1,693,439	4,378,874	225,374,541
1931-1932.....	133,610,498	15,706,287	16,807,097	974,649	13,738,895	180,837,426
1932-1933.....	200,254,656	15,662,256	6,929,791	1,027,504	2,836,333	226,710,540
1933-1934.....	166,952,408	16,824,993	6,325,712	720,692	1,204,467	192,028,272
1934-1935.....	105,273,843	13,027,608	11,047,771	485,990	1,306,106	131,141,318
1935-1936.....	184,120,242	19,563,798	14,652,637	582,309	2,103,700	221,022,686
1936-1937.....	178,492,948	13,159,516	6,724,438	586,734	2,811,294	201,774,930

¹Receipts only.

8.—Canadian Grain Handled at Eastern Elevators, by Classes of Ports, during the crop year ended July 31, 1937.

Ports.	Wheat.	Oats.	Barley.	Flaxseed.	Rye.	Total. ¹
	bu.	bu.	bu.	bu.	bu.	bu.
Lake Huron and Georgian Bay Ports—						
Receipts—Water.....	25,088,085	3,978,524	745,185	166,891	381,981	30,360,666
Rail.....	134,268	29,038	62,780	Nil	Nil	226,086
Totals, Receipts.....	25,222,353	4,007,562	807,965	166,891	381,981	30,586,752
Shipments—Water.....	7,382,880	Nil	30,000	Nil	343,312	7,756,192
Rail.....	22,719,322	4,257,354	820,660	166,891	49,124	28,013,351
Totals, Shipments.....	30,102,202	4,257,354	850,660	166,891	392,436	35,769,543
Lower Lake Ports—						
Receipts—Water.....	54,449,583	2,807,004	2,402,702	135,818	493,601	60,288,708
Rail.....	234,819	237,641	680,370	Nil	6,363	1,159,193
Totals, Receipts.....	54,684,402	3,044,645	3,083,072	135,818	499,964	61,447,901
Shipments—Water.....	48,270,163	1,034,266	1,805,672	97,293	501,269	51,708,663
Rail.....	9,349,000	2,129,933	1,436,896	38,525	209,090	13,163,444
Totals, Shipments.....	57,619,163	3,164,199	3,242,568	135,818	710,359	64,872,107
St. Lawrence Ports—						
Receipts—Water.....	67,968,214	4,464,738	1,882,070	284,025	1,554,120	76,153,167
Rail.....	4,997,297	666,168	409,681	Nil	Nil	6,073,146
Totals, Receipts.....	72,965,511	5,130,906	2,291,751	284,025	1,554,120	82,226,313
Shipments—Water.....	75,136,492	3,401,231	1,623,728	Nil	1,660,947	81,822,398
Rail.....	5,024,887	2,245,615	942,678	284,025	39,034	8,536,239
Totals, Shipments.....	80,161,379	5,646,846	2,566,406	284,025	1,699,981	90,358,637
Maritime Ports—						
Receipts—Water.....	238,517	Nil	Nil	Nil	Nil	238,517
Rail.....	8,717,782	90,372	64,804	Nil	8,518	8,881,476
Totals, Receipts.....	8,956,299	90,372	64,804	Nil	8,518	9,119,993
Shipments—Water.....	10,562,565	85,487	64,804	Nil	8,518	10,721,374
Rail.....	47,639	5,630	Nil	Nil	Nil	53,269
Totals, Shipments.....	10,610,204	91,117	64,804	Nil	8,518	10,774,643

¹Exclusive of minor quantities of Canadian corn, buckwheat, and mixed grain.

Flour Milling in 1936.—The flour- and grist-milling industry in Canada in 1936 showed a decrease of 9 mills of all classes from 1935, and capacity of flour mills was decreased by 3,198 barrels of flour a day from the 1935 figure. Capital investment was \$55,275,090. The mills were distributed by provinces as shown in Table 9. Statistics of the employees, value of products, etc., for both flour and feed mills, for the latest year available, will be found in Table 7 of the chapter on Manufactures, pp. 403-472 of this volume.

9.—Flour-Mills of Canada, with Their Equipment and Capacities, by Provinces, 1936, with Totals, 1935.

Province.	Flour and Grist Mills.	Chopping Mills.	Total Mills.	Rolls.	Stones.	Capacity of Flour-Mills.
	No.	No.	No.	pairs.	pairs.	bbl. per day.
Prince Edward Island.....	11	1	12	60	12	482
Nova Scotia.....	3	8	11	11	Nil	93
New Brunswick.....	6	21	27	50	Nil	390
Quebec.....	85	148	233	536	144	12,620
Ontario.....	124	513	637	1,981	41	50,333
Manitoba.....	34	7	41	555	2	11,385
Saskatchewan.....	49	19	68	553	15	13,635
Alberta.....	48	33	81	633	5	12,369
British Columbia.....	3	5	8	46	Nil	735
Totals, 1936.....	363	755	1,118	4,425	219	102,042
Totals, 1935.....	384	743	1,127	4,496	238	105,240

Section 3.—Marketing of Live Stock and Live-Stock Products.*

The estimated value of farm animals sold for meat in Canada in 1936 was \$130,886,000. In addition, the 1936 wool production was worth \$2,783,000 and the farm value of poultry and eggs produced was \$53,236,000. Live stock makes a very important contribution to farmers' income and also provides the basis for a large slaughtering and meat-packing industry in Canada. Since the War the slaughtering and meat-packing industry has been one of the most important single manufacturing industries in Canada.

*Revised by the Agricultural Branch, Dominion Bureau of Statistics. For more detailed information on this subject, see: Canada Year Book, 1922-23, pp. 594-595; Live Stock and Animal Products Statistics, published annually by the Dominion Bureau of Statistics; and The Annual Market Review, published annually by the Live Stock Branch of the Dominion Department of Agriculture. Statistics of live stock and poultry are given at pp. 251 to 255 of this volume.

10.—Animals in Canada, Animals Killed or Sold by Farmers, and Wool Produced in Canada, by census years 1871-1931.

Year.	Animals in Canada.			Animals Killed or Sold.			Wool Produced.
	Cattle. ¹	Sheep.	Swine.	Cattle.	Sheep.	Swine.	
	No.	No.	No.	No.	No.	No.	
1871.....	2,484,655	3,155,509	1,366,083	507,725	1,557,430	1,216,097	11,103,480
1881.....	3,382,396	3,048,678	1,207,619	657,681	1,496,465	1,302,503	11,300,736
1891.....	3,997,023	2,563,781	1,733,850	957,737	1,464,172	1,791,104	10,031,970
1901.....	5,576,451	2,510,239	2,353,828	1,110,209	1,329,141	2,497,636	10,657,597
1911 ²	6,526,083	2,174,300	3,634,778	1,752,792 ³	949,039 ³	2,771,755 ³	6,933,955
1921 ²	8,519,484	3,203,966	3,404,730	2,097,390	1,217,987	2,972,331	11,338,268
1931 ²	8,099,883	3,627,116	4,774,828	2,046,428	1,296,158	3,578,189	12,794,634

¹Figures for 1871-91 do not include work oxen.

²Census taken as of June 1, while previous censuses

were taken in April, so that the proportion of young animals is greater than for years previous to 1911.
³Animals slaughtered on farms were not included. The following figures are comparable with data given for other years, the amounts being partly estimated: cattle, 1,915,059; sheep, 1,097,015; swine, 4,282,624.

12.—Total Receipts of Live-Stock and Disposition of Slaughter and Store Stock at Principal Markets in Canada, calendar years 1935 and 1936—concluded.

Market and Item.	1935.				1936.			
	Cattle.	Calves.	Hogs.	Sheep and Lambs.	Cattle.	Calves.	Hogs.	Sheep and Lambs.
	No.	No.	No.	No.	No.	No.	No.	No.
Winnipeg—								
Receipts (total).....	294,169	97,610	215,697	69,502	307,860	121,457	258,986	62,306
Shipments—								
1. Slaughter stock to packers..	157,953	66,213	144,020	58,919	169,899	80,071	201,347	54,185
2. Slaughter stock to butchers.	32,055	17,375	7,976	4,765	28,399	21,851	7,401	4,668
3. Store stock to country points	40,361	2,276	Nil	Nil	48,206	2,424	Nil	Nil
Calgary—								
Receipts (total).....	59,625	15,237	84,090	13,304	83,242	19,762	83,464	13,322
Shipments—								
1. Slaughter stock to packers..	47,060	1	71,352	12,368	62,744	1	66,890	11,292
2. Slaughter stock to butchers.	6,221	1	696	377	7,170	1	507	322
3. Store stock to country points	16,759	50	Nil	Nil	17,919	Nil	Nil	Nil
Edmonton—								
Receipts (total).....	50,206	13,064	77,561	18,215	58,211	16,616	58,566	18,397
Shipments—								
1. Slaughter stock to packers..	27,510	8,165	69,678	11,632	27,946	7,107	48,992	13,797
2. Slaughter stock to butchers.	2,695	1,589	2,317	2,466	3,007	1,827	1,957	1,873
3. Store stock to country points	12,636	624	Nil	Nil	8,715	386	Nil	Nil
Prince Albert—								
Receipts (total).....	6,479	945	28,549	1,765	10,908	2,272	32,921	3,466
Shipments—								
1. Slaughter stock to packers..	2,198	505	27,095	1,526	4,058	1,475	32,393	3,292
2. Slaughter stock to butchers.	360	178	45	14	309	78	3	10
3. Store stock to country points	2,265	58	Nil	Nil	3,374	354	Nil	Nil
Moose Jaw—								
Receipts (total).....	16,048	3,883	19,862	16,020	15,406	5,824	30,266	15,214
Shipments—								
1. Slaughter stock to packers..	11,227	2,998	17,658	7,061	12,300	4,676	26,318	7,904
2. Slaughter stock to butchers.	4	Nil	9	20	23	1	Nil	Nil
3. Store stock to country points	3,928	750	Nil	Nil	2,189	764	Nil	Nil
Saskatoon—								
Receipts (total).....	9,752	4,204	32,104	4,192	15,859	6,520	51,852	5,990
Shipments—								
1. Slaughter stock to packers..	5,444	2,975	26,425	3,634	8,876	5,217	46,671	4,944
2. Slaughter stock to butchers.	2,871	1,387	2,134	490	3,422	1,521	2,333	645
3. Store stock to country points	1,009	68	Nil	Nil	1,630	55	Nil	Nil
Regina—								
Receipts (total).....	7,339	3,657	15,685	1,971	8,044	4,332	27,499	2,588
Shipments—								
1. Slaughter stock to packers..	4,857	2,019	13,074	1,530	4,724	2,424	23,564	1,635
2. Slaughter stock to butchers.	1,997	1,584	1,140	412	2,206	1,919	1,186	961
3. Store stock to country points	250	14	Nil	Nil	596	22	Nil	Nil

¹Included with cattle.

The interprovincial and export movement of live stock in 1936 showed increases in all classes. Total shipments in 1936 with comparative figures for 1935 in parentheses were as follows: cattle 756,512 (584,642); calves 255,991 (191,128); swine 900,185 (891,266); and sheep 262,013 (249,451).

The marketings of live stock through stockyards, by direct shipment to packers, or by export according to provinces of origin for the calendar year 1936 are given in Table 13. In Table 14 are given the statistics of the grading of animals from several provinces marketed through the stockyards in 1936 and, in the case of hogs, those marketed direct to packers, since a majority of these animals are handled in this way. Of recent years the practice is developing of grading an increasing proportion of hogs by the carcass after being dressed at the packing plant. Hogs graded by each method are shown separately in Table 14.

13.—Live Stock from Several Provinces of Canada, Marketed through Stockyards, Packers, etc., calendar year 1936.

Live Stock.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskat- chewan.	Alberta.	Total.
	No.	No.	No.	No.	No.	No.	No.
Cattle—							
Totals to stockyards.....	344	20,882	297,016	98,985	250,563	223,158	890,948
Direct to packers.....	2,289	6,929	95,299	27,587	50,513	84,070	266,687
Direct for export.....	3,985	3,956	46,060	2,308	12,025	56,583	124,917
Totals, Cattle.....	6,618	31,767	438,375	128,880	313,101	363,811	1,282,552
Calves—							
Totals to stockyards.....	4,037	81,639	169,152	48,858	80,829	55,447	439,962
Direct to packers.....	3,536	28,756	91,469	32,807	7,142	50,332	214,042
Direct for export.....	1,487	3,389	17,133	118	554	3,327	26,058
Totals, Calves.....	9,060	113,784	277,804	81,783	88,525	109,106	680,062
Hogs—							
Totals to stockyards.....	1,576	150,008	347,593	109,396	297,498	265,462	1,171,533
Direct to packers.....	47,211	101,070	1,230,026	158,280	272,499	764,847	2,573,933
Direct for export.....	6,178	412	35,543	180	16	9,157	51,486
Totals, Hogs.....	54,965	251,490	1,613,162	267,856	570,013	1,039,466	3,796,952
Sheep—							
Totals to stockyards.....	3,517	95,735	146,885	28,593	76,574	78,715	430,019
Direct to packers.....	11,421	27,465	103,477	52,462	17,110	167,825	379,760
Direct for export.....	528	37	1,611	Nil	4	216	2,396
Totals, Sheep.....	15,466	123,237	251,973	81,055	93,688	246,756	812,175
Store cattle purchased.....	2,778	4,148	125,278	26,809	4,068	20,360	183,441

14.—Grades of Live Stock from Several Provinces of Canada, Marketed at the Stockyards, calendar year 1936.

Live Stock and Grade.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskat- chewan.	Alberta.	Total.
	No.	No.	No.	No.	No.	No.	No.
1. Cattle—							
Steers up to 1,050 lb.—							
Choice.....	Nil	9	247	1,740	2,444	2,003	6,443
Good.....	Nil	95	17,757	5,173	8,550	8,135	39,710
Medium.....	Nil	1,073	31,574	7,200	16,353	14,233	70,433
Common.....	23	1,134	10,800	3,015	11,374	15,203	41,549
Steers over 1,050 lb.—							
Choice.....	Nil	45	8,603	1,691	2,715	2,993	16,047
Good.....	Nil	837	27,828	4,041	7,688	8,290	48,684
Medium.....	Nil	1,028	21,565	2,384	6,711	9,367	41,055
Common.....	Nil	376	3,636	388	1,283	3,291	8,974
Heifers—							
Choice.....	Nil	8	42	1,668	3,027	2,812	7,557
Good.....	Nil	122	17,659	4,516	9,577	9,559	41,433
Medium.....	2	317	27,142	7,126	20,256	16,139	70,982
Common.....	16	451	8,599	3,998	13,237	13,847	40,148
Fed Calves—							
Choice.....	Nil	Nil	5,744	1,089	1,436	1,108	9,377
Good.....	Nil	2	9,182	1,750	2,612	2,609	16,155
Medium.....	Nil	16	11,329	3,193	5,477	3,937	23,952
Cows—							
Good.....	1	663	16,857	4,655	12,125	16,365	50,666
Medium.....	13	2,955	16,904	8,797	17,983	12,937	59,589
Common.....	5	3,190	15,133	5,014	10,554	6,766	40,662
Canners and cutters.....	277	4,624	19,887	6,275	10,907	4,823	46,793
Bulls—							
Good.....	Nil	79	3,912	1,105	2,199	1,435	8,730
Common.....	7	2,941	7,244	1,673	3,001	2,392	17,258
Stocker and Feeder Steers—							
Good.....	Nil	8	3,530	8,413	21,796	16,303	50,050
Common.....	Nil	36	5,153	8,691	25,442	19,328	58,650

14.—Grades of Live Stock from Several Provinces of Canada, Marketed at the Stockyards, calendar year 1936—concluded.

Live Stock and Grade.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskat- chewan.	Alberta.	Total.
	No.	No.	No.	No.	No.	No.	No.
1. Cattle—concluded.							
Stock Cows and Heifers—							
Good.....	Nil	Nil	24	1,250	5,243	4,403	10,920
Common.....	Nil	Nil	56	1,948	5,615	4,222	11,841
Milkers and springers.....	Nil	795	5,625	997	691	104	8,212
Unclassified.....	Nil	78	984	1,195	22,267	20,554	45,078
Totals, Cattle.....	344	20,882	297,016	98,985	250,563	223,158	890,948
2. Calves—							
Veal—							
Good and choice.....	1	1,742	52,561	20,689	23,365	15,437	113,795
Common and medium...	557	49,540	106,742	27,608	52,731	35,422	272,600
Grass.....	3,479	30,357	9,849	561	4,733	4,588	53,567
Totals, Calves.....	4,037	81,639	169,152	48,858	80,829	55,447	439,962
3. Hogs, Graded Alive—1							
Select bacon.....	966	40,709	408,147	43,806	90,393	221,966	805,987
Bacon.....	2,463	81,431	644,601	96,257	186,359	380,363	1,391,474
Butchers.....	3,162	47,878	119,451	32,584	107,177	250,524	560,776
Heavies.....	446	6,281	27,786	7,691	20,492	22,201	84,897
Extra heavies.....	343	3,787	5,956	3,974	11,189	5,926	31,175
Lights and feeders.....	3,266	31,300	48,574	56,522	86,195	58,739	284,596
Sows No. 1.....	469	1,657	5,605	8,437	23,820	16,458	56,446
Sows No. 2.....	182	2,592	27,834	5,078	13,775	22,394	71,855
Roughs.....	56	38	1,761	576	2,008	1,673	6,112
Stags.....	51	152	1,637	452	1,117	1,246	4,655
Totals, Hogs Graded Alive.....	11,404	215,825	1,291,352	255,377	542,525	981,490	3,297,973
Hog Carcasses—1							
A.....	10,853	7,704	109,703	3,640	7,385	15,491	154,776
B.....	16,629	15,583	137,016	5,703	11,958	23,387	210,276
C.....	3,143	3,668	11,773	1,086	3,049	5,456	28,175
D.....	1,106	118	1,895	97	578	272	4,066
E.....	893	187	1,844	55	238	335	3,552
Heavy.....	731	1,052	9,777	449	940	2,435	15,384
Extra heavy.....	295	637	1,946	93	341	521	3,833
Light.....	2,960	5,977	9,672	945	1,631	890	22,075
Sows.....	773	327	2,641	231	1,352	32	5,356
Totals, Hog Car- casses.....	37,383	35,253	286,267	12,299	27,472	48,519	447,493
4. Lambs and Sheep—							
Lambs—							
Good handyweights.....	1,335	52,244	100,533	19,332	30,482	39,787	243,713
Good heavies.....	14	871	4,650	840	10,885	2,934	20,194
Common, all weights....	684	18,371	13,743	6,209	11,568	11,075	61,650
Bucks.....	628	14,210	6,171	285	261	140	21,695
Sheep—							
Good heavies.....	28	466	3,158	13	615	2,101	6,381
Good handyweights.....	362	4,189	11,534	1,228	3,840	4,589	25,742
Common.....	466	5,384	7,096	686	1,666	2,616	17,914
Unclassified.....	Nil	Nil	Nil	Nil	17,257	15,473	32,730
Totals, Lambs and Sheep.....	3,517	95,735	146,885	28,593	76,574	78,715	430,019

¹Including shipments direct to packers.

Slaughtering and Meat Packing.—This industry has become one of the most important branches of manufacturing in Canada. Its growth, shown by the statistics of Table 15, has been accompanied by a concentration of the major part of the production of the industry into a comparatively small number of large establishments, thereby facilitating the utilization of by-products and greater efficiency of operation. There has been a large increase in the number of establishments since 1931, due to the inclusion of wholesale butchers operating small plants engaged in

slaughtering only. The inclusion of these small establishments did not affect materially the value of production of the industry. The numbers of live stock slaughtered at Canadian inspected establishments in 1935 and 1936 are shown in Table 16.

15.—Principal Statistics of the Slaughtering and Meat-Packing Industry of Canada, decennially 1870-1930, annually 1932-36.

Description.	1870.	1880.	1890.	1900. ¹	1910. ¹	1920.
Establishments.....No.	193	203	528	57	80	86
Capital invested.....\$	419,325	1,449,677	2,185,077	5,395,162	15,321,088	84,288,306
Employees.....No.	841	852	1,699	2,416	4,214	11,978
Salaries and wages.....\$	145,376	209,483	505,553	1,020,164	2,685,518	16,691,471
Cost of materials.....\$	2,942,786	3,163,576	5,556,746	19,520,058	40,951,761	170,916,888
Value of products.....\$	3,799,552	4,084,133	7,132,831	22,217,984	48,527,076	240,544,618
	1930.	1932.	1933.	1934.	1935.	1936.
Establishments.....No.	76	141 ²	135 ²	147 ²	139 ²	142 ²
Capital invested.....\$	60,778,996	53,227,929	54,590,398	56,765,624	58,207,715	61,806,675
Employees.....No.	9,290	9,101	9,289	10,119	10,674	11,776
Salaries and wages.....\$	12,114,667	10,349,315	10,103,744	11,608,338	12,448,347	13,921,410
Cost of materials.....\$	129,004,327	65,575,957	70,467,544	98,417,162	103,191,810	126,630,086
Value of products.....\$	164,029,953	91,246,523	92,366,137	122,112,406	133,379,312	156,971,640

¹Figures for these years cover establishments employing five hands or over only.

²See the text preceding this table.

16.—Live Stock Slaughtered at Canadian Inspected Establishments, by months, 1935 and 1936.

Month.	1935.				1936.			
	Cattle.	Calves.	Sheep.	Hogs.	Cattle.	Calves.	Sheep.	Hogs.
	No.	No.	No.	No.	No.	No.	No.	No.
January.....	67,716	28,142	40,448	281,689	69,810	27,060	48,434	275,775
February.....	53,401	29,947	37,241	254,944	62,097	29,099	43,398	245,049
March.....	56,234	49,246	39,932	242,820	61,927	48,588	42,563	262,531
April.....	57,189	72,252	43,308	255,666	66,816	67,583	32,312	266,855
May.....	63,713	76,381	37,710	244,893	65,132	71,784	26,094	279,710
June.....	52,063	65,056	54,008	194,613	67,029	68,946	51,882	269,474
July.....	56,047	57,360	73,468	191,088	68,439	57,096	67,329	232,254
August.....	66,679	47,505	97,190	175,542	76,534	52,613	81,251	232,050
September.....	72,313	46,007	105,083	176,786	89,832	55,404	107,576	284,186
October.....	92,844	49,115	170,537	262,599	111,665	51,070	168,378	391,890
November.....	88,942	39,515	108,475	256,361	102,614	39,553	109,040	410,449
December.....	62,570	26,325	53,828	268,824	78,334	33,820	52,718	412,311
Totals.....	789,711	586,851	861,228	2,805,825	920,229	602,616	830,975	3,562,534

Consumption of Animal Products.—The figures of Table 17 provide an indication of the standard of the diet of the people of Canada. Animal products such as meat, butter, and eggs are generally regarded as features of the diet of people with a high standard of living. In Canada there is a relatively high per capita consumption of beef, pork, butter, and eggs but a relatively low per capita consumption of mutton and lamb, and cheese. During the depression years, the per capita consumption of these products was not affected as much as might have been expected. Changes in the per capita consumption of various animal products occur as a result of changes in price relationships. These, in turn, are related to cycles of over- and under-production particularly marked in the case of the meat products of hogs and cattle. Beef and pork, particularly, interchange in leadership as regards the amount consumed, according to the price relationships between them. In 1937, 58·89 pounds of beef were consumed per capita as compared with 62·35 pounds of pork. In 1933, pork consumption was 75·02 pounds per capita and beef consumption 55·50 pounds per capita.

**17.—Total and Per Capita¹ Consumption of Meats and Live-Stock Products in
Canada, calendar years 1933-37.**

Item.	1933.	1934.	1935.	1936.	1937. ²
Beef and Veal—					
Slaughtered in Canada.....No.	1,715,424	2,137,492	2,035,698	1,889,731	1,853,528
Estimated dressed weight.....lb.	608,975,520	758,809,660	722,672,790	670,854,505	658,002,440
On hand, Jan. 1.....“	9,821,741	16,127,300	25,396,292	24,836,592	28,452,603
Imports of beef.....“	179,875	196,258	13,959,458	12,179,356	11,786,650
	618,977,136	775,133,218	762,028,540	707,870,453	698,241,693
Exports of beef.....“	10,009,700	15,092,200	13,512,600	12,416,300	17,265,200
	608,967,436	760,041,018	748,515,940	695,454,153	680,976,493
On hand, Dec. 31.....“	16,127,300	25,396,292	24,836,592	28,452,603	26,109,401
Totals, consumption.....“	592,840,136	734,644,726	723,679,348	667,001,550	654,867,092
Consumption per capita.....“	55.50	67.87	66.18	60.48	58.89
Pork—					
Slaughtered in Canada.....No.	5,813,799	5,590,673	5,415,289	6,270,565	5,985,945
Estimated dressed weight.....lb.	872,069,850	838,600,950	812,293,350	940,584,750	897,891,750
On hand, Jan. 1.....“	29,552,198	24,759,461	28,116,841	30,335,225	49,604,317
Imports of pork.....“	3,774,034	4,147,727	430,348	2,877,456	2,068,526
	905,396,082	867,508,138	840,840,539	973,797,431	949,564,593
Exports of pork.....“	79,302,600	123,750,200	132,435,300	174,492,800	219,141,500
	826,093,482	743,757,938	708,405,239	799,304,631	737,423,093
On hand, Dec. 31.....“	24,759,461	28,116,841	30,335,225	49,604,317	37,116,949
Totals, consumption.....“	801,334,021	715,641,097	678,070,014	749,700,314	693,306,144
Consumption per capita.....“	75.02	66.12	62.01	67.98	62.35
Mutton and Lamb—					
Slaughtered in Canada.....No.	1,691,072	1,708,598	1,696,061	1,660,114	1,667,381
Estimated dressed weight.....lb.	67,642,880	68,343,920	67,842,440	66,404,560	66,695,240
On hand, Jan. 1.....“	5,293,237	7,200,802	7,480,457	5,578,415	7,196,840
Imports of mutton and lamb.....“	296,581	37,764	83,162	19,079	40,245
	73,232,698	75,582,486	75,406,059	72,002,054	73,932,325
Exports of mutton and lamb.....“	406,500	378,800	315,500	231,800	283,500
	72,826,198	75,203,686	75,090,559	71,770,254	73,648,825
On hand, Dec. 31.....“	7,200,802	7,480,457	5,578,415	7,196,840	5,119,146
Totals, consumption.....“	65,625,396	67,723,229	69,512,144	64,573,414	68,529,679
Consumption per capita.....“	6.14	6.26	6.36	5.86	6.16
Summary of Per Capita Consumption, All Meats—					
Beef and veal.....lb.	55.50	67.87	66.18	60.48	58.89
Pork.....“	75.02	66.12	62.01	67.98	62.35
Mutton and lamb.....“	6.14	6.26	6.36	5.86	6.16
Totals, Consumption of All Meats Per Capita.....“	136.66	140.25	134.55	134.32	127.40
Butter—					
On hand, Jan. 1.....lb.	21,688,844	22,026,655	32,422,719	32,610,519 ³	36,671,543
Production—Creamery.....“	219,232,546	234,852,961	240,918,799	250,931,777	246,387,300
Home-made.....“	106,485,000	109,918,000	114,161,999 ⁴	114,026,000	113,084,000
Imports.....“	1,377,137	2,873,562	148,541	117,281	65,918
	348,783,527	369,671,178	387,652,058 ⁴	397,685,577	396,208,761
Exports.....“	4,437,200	428,300	7,697,000	5,128,800	4,096,600
	344,346,327	369,242,878	379,955,058 ⁴	392,556,777	392,112,161
On hand, Dec. 31.....“	22,026,655	32,422,719	32,302,519	36,671,543	28,352,535
Totals, consumption.....“	322,319,672	336,820,159	347,652,539 ⁴	355,885,234	363,759,626
Consumption per capita.....“	30.18	31.12	31.79 ⁴	32.27	32.71
Cheese—					
On hand, Jan. 1.....lb.	13,279,857	15,973,921	17,196,375	24,562,606	24,025,899
Production—Factory.....“	111,146,493	99,346,617	100,427,390	119,123,483	128,444,300
Home-made.....“	943,300	1,011,300	1,232,148 ⁴	1,229,300	1,232,300
Imports.....“	967,613	946,401	1,274,130	1,239,882	1,410,336
	126,337,263	117,278,239	120,130,043 ⁴	146,155,271	155,112,835

¹For footnotes, see end of table, p. 608.

17.—Total and Per Capita¹ Consumption of Meats and Live-Stock Products in Canada, calendar years 1933-37—concluded.

Item.	1933.	1934.	1935.	1936.	1937. ²
Cheese—concluded.					
Exports..... lb.	74,168,600	61,167,800	55,718,700	81,890,300	88,955,300
On hand, Dec. 31..... "	52,168,663 15,973,921	56,110,439 17,196,375	64,411,433 ⁴ 24,562,606	64,264,971 24,025,899	66,157,535 26,869,629
Totals, consumption..... "	36,194,742	38,914,064	39,848,737 ⁴	40,239,072	39,287,906
Consumption per capita..... "	3.39	3.60	3.64 ⁴	3.65	3.53
Eggs—					
On hand, Jan. 1..... doz.	4,054,732	2,875,825	5,097,164	3,359,197 ³	4,749,444
Production—Farm..... "	222,254,000	223,272,000	223,540,000	219,494,000	219,443,000
Other..... "	20,500,000	20,500,000	20,500,000	20,500,000	20,500,000
Imports..... "	260,510	1,153,715	364,570	869,593	593,558
Exports..... "	247,079,242 1,987,612	247,801,540 2,001,024	249,501,734 1,300,744	244,222,790 1,203,814	245,286,002 1,602,011
On hand, Dec. 31..... "	245,091,630 2,875,825	245,800,516 5,097,164	248,200,990 3,315,007	243,018,976 4,749,444	243,683,991 4,726,693
Totals, consumption..... "	242,215,805	240,703,352	244,885,983	238,269,532	238,957,298
Consumption per capita..... "	22.68	22.24	22.39	21.61	21.49
Poultry—					
On farms..... No.	59,324,400	59,798,700	56,768,800	59,339,400	57,510,100
Elsewhere..... "	5,675,000	5,675,000	5,675,000	5,675,000	5,675,000
Totals..... "	64,999,400	65,473,700	62,443,800	65,014,400	63,185,100
Marketings..... "	27,596,210	33,893,555	38,125,350	39,641,625	38,537,805
Estimated dressed weight..... lb.	154,627,165	186,141,585	205,628,940	212,824,200	207,132,960
On hand, Jan. 1..... "	6,969,908	10,729,147	11,228,878	11,435,954	16,194,650
Estimated exports..... "	161,597,073 1,352,183	196,870,732 2,585,606	216,857,818 2,991,356	224,260,154 4,909,317	223,327,610 11,104,366
On hand, Dec. 31..... "	160,244,890 10,729,147	194,285,126 11,228,878	213,866,462 11,435,954	219,350,837 16,194,650	212,223,244 10,401,204
Totals, consumption..... "	149,515,743	183,056,248	202,430,508	203,146,187	201,822,040
Consumption per capita..... "	14.00	16.91	18.51	18.43	18.15

¹ For estimates of population upon which per capita figures are calculated, see p. 155.

to revision. ² Includes carloads in transit.

Book. ³ Fowl, turkeys, ducks, and geese. ⁴ Revised since the publication of the 1937 Year

Export and Import Trade in Live Stock and Live-Stock Products.—The exports of live stock and live-stock products from the Dominion to the United Kingdom, the United States, and all countries, are shown for the four fiscal years ended Mar. 31, 1934-37, in Table 12 of the chapter on External Trade, at pp. 540-543, and imports in Table 13 at pp. 554-557. Exports and imports by calendar years 1932-36, may be found at pp. 73, 75, and 76 of the report on "Live Stock and Animal Products Statistics, 1936". At pp. 53-78 of the report on "Trade of Canada (Imports for Consumption and Exports), Calendar Year 1937" figures are given of exports of animals and animal products for 1936 and 1937 and imports of this class for the same calendar years will be found at pp. 210-234 of the same report.

Section 4.—Cold Storage.

Cold Storage Warehouses.—Under the Cold Storage Act, 1907 (6-7 Edw. VII, c. 6), now consolidated as c. 25, R.S.C., 1927, subsidies have been granted by the Dominion Government toward the construction and equipment of cold storage warehouses open to the public, the Act and regulations made thereunder being administered by the Department of Agriculture. Table 18 shows for 1937 the number of cold storage warehouses in Canada, with the refrigerated space.

18.—Cold Storage Warehouses in Canada, by Provinces, 1937.

NOTE.—The figures in this table were supplied through the courtesy of J. F. Singleton, Associate Director of Marketing Services, Dairy Products and Cold Storage, Dominion Department of Agriculture. Creameries with mechanical refrigeration are not now included, although for years previous to 1936 they were considered as cold storage warehouses in these tables.

Province.	Subsidized Public Warehouses.				All Warehouses.	
	Num-ber.	Refriger-ated Space.	Cost.	Total Subsidy.	Num-ber.	Refriger-ated Space.
		cu. ft.	\$	\$		cu. ft.
Prince Edward Island.....	5	273,698	130,673	39,202	10	338,002
Nova Scotia.....	12	2,559,730	2,805,262	833,578	22	3,197,533
New Brunswick.....	3	894,177	288,410	86,525	23	1,219,043
Quebec.....	8	367,474	333,787	100,136	64	11,366,060
Ontario.....	37	4,631,145	2,051,912	609,549	128	17,233,433
Manitoba.....	1	27,500	32,000	9,600	36	5,386,703
Saskatchewan.....	4	437,596	268,707	80,612	21	1,879,291
Alberta.....	3	402,810	301,512	90,453	17	4,216,045
British Columbia.....	25	5,592,490	2,402,821	720,846	76	10,474,373
Yukon.....	Nil	Nil	Nil	Nil	1	44,900
Totals.....	98	15,186,620	8,615,093	2,570,501	398	55,355,353

Cold Storage Stocks.—Statistics of the stocks of food in the cold storage warehouses of Canada are collected and published monthly by the Agricultural Branch of the Dominion Bureau of Statistics. A summary of cold storage reports is published annually as a separate statement and the same data are included in the report on "Live Stock and Animal Products Statistics", published annually. In Table 19 are included statistics, by months for 1936 and 1937, of the stocks of food in cold storage and in process of cure for various important commodities.

19.—Stocks of Food Commodities on Hand in Cold Storages and Dairy Factories, by Months, 1936 and 1937.

NOTE.—Figures in this table are of stocks on hand on the first of each month as published by the Agricultural Branch, Dominion Bureau of Statistics.

Year and Month.	Eggs.	Butter. ¹	Factory Cheese.	Beef.		
				Fresh, Not Frozen.	Fresh, Frozen.	Cured or in Cure.
	doz.	lb.	lb.	lb.	lb.	lb.
1936.						
January.....	3,315,007	32,302,519	24,562,606	4,684,151	16,735,132	557,029
February.....	2,350,489	25,086,097	22,216,782	6,324,808	13,342,795	643,129
March.....	1,187,302	16,521,114	19,344,121	6,255,241	9,980,027	726,136
April.....	1,210,332 ¹	8,849,551	16,875,807 ¹	5,742,926	10,152,754	763,395
May.....	3,774,692 ¹	4,860,978	14,170,257	5,443,034	9,187,759	807,193
June.....	9,129,882 ¹	10,366,919	15,860,150	4,883,385	7,876,677	1,096,974
July.....	13,311,462 ¹	28,162,113	24,373,263 ¹	5,548,806	6,255,490	1,029,626
August.....	13,810,299 ¹	41,882,554	30,700,229	5,113,578	5,611,696	1,008,089
September.....	14,483,020 ¹	50,823,973	34,031,775	5,826,942	6,060,843	873,212
October.....	13,759,249	55,743,542	38,623,581	6,671,898	9,115,509	728,646
November.....	10,092,939	53,474,770	33,044,012	7,251,244	14,322,361	609,211
December.....	6,113,565	44,618,292	22,771,387 ¹	7,521,109	18,051,006	413,808
1937.						
January.....	4,705,254	35,999,543	24,025,899	4,784,458	18,608,326	554,608
February.....	4,598,418	29,112,998	21,866,628	6,102,067	13,872,673	552,571
March.....	3,749,647	18,940,512	20,112,309	4,825,504	12,431,621	686,713
April.....	3,257,157	9,250,690	18,008,959	5,769,785	9,236,342	687,404
May.....	6,967,345	5,860,895	15,985,455	5,989,584	7,440,367	476,829
June.....	12,660,324	9,270,550	19,908,736	5,555,536	5,558,451	344,867
July.....	16,264,639	26,828,920	30,571,172	5,533,237	3,994,224	370,798
August.....	16,304,980	41,026,247	35,508,497	4,649,544	4,435,946	436,974
September.....	16,010,116	49,505,246	42,190,862	6,017,035	5,447,974	529,801
October.....	14,266,584	54,551,566	43,246,764	8,119,511	8,898,668	690,469
November.....	10,130,137	48,122,269	36,562,193	8,514,250	16,892,754	640,320
December.....	6,805,055	38,230,729	27,643,125	7,858,576	20,380,674	425,562

¹Revised since the publication of the 1937 Year Book.

**19.—Stocks of Food Commodities on Hand in Cold Storages and Dairy Factories,
by Months, 1936 and 1937—concluded.**

Month.	Veal.	Pork.			Lard.	Mutton and Lamb.	Poultry.
		Fresh, Not Frozen.	Fresh, Frozen.	Cured or in Cure.			
	lb.	lb.	lb.	lb.	lb.	lb.	lb.
1936.							
January.....	2,860,230	2,771,191	12,390,313	15,173,721	3,437,438	5,578,415	12,055,251
February.....	2,188,654	3,423,632	13,438,547	16,199,163	3,668,097	4,778,272	11,138,380
March.....	1,633,598	3,421,409	14,921,732	17,328,753	2,770,156	3,621,293	9,983,832
April.....	1,488,049	3,561,311	15,502,256	17,918,022	2,912,686	2,822,427	8,812,214
May.....	1,934,575	4,101,961	16,837,436	16,923,903	3,470,503	1,660,734	6,783,167
June.....	2,559,990	3,287,827	16,874,093	17,860,779	3,780,486	761,306	5,431,885
July.....	3,166,106	3,888,526	15,374,014	17,767,675	3,297,667	676,309	4,628,886
August.....	3,660,896	3,176,582	11,205,252	16,169,557	3,223,744	678,106	4,213,133
September.....	3,817,491	3,037,693	8,348,283	16,401,037	2,306,967	766,902	3,694,090
October.....	4,602,709	4,103,055	7,678,621	16,393,488	2,203,033	1,767,082	3,997,416
November.....	5,315,710	4,191,461	11,999,141	19,949,769	2,363,477	5,670,284	5,380,982
December.....	5,051,778	5,034,860	20,040,936	18,024,649	2,202,841	7,420,341	8,883,048
1937.							
January.....	4,505,211	3,734,090	26,744,239	19,125,988	2,332,425	7,196,840	16,829,115
February.....	3,321,600	4,251,036	27,166,953	20,359,618	2,206,140	6,168,908	15,761,082
March.....	2,361,458	4,345,048	29,110,785	21,712,355	2,420,634	5,510,653	13,939,429
April.....	2,082,829	4,186,886	30,512,801	20,263,511	2,340,209	4,516,891	10,787,878
May.....	2,105,446	4,733,554	32,492,523	20,719,674	2,954,256	3,252,156	8,145,899
June.....	2,651,753	3,767,005	27,970,449	19,581,186	2,622,756	1,898,925	6,890,061
July.....	2,862,992	3,913,491	22,095,125	19,187,419	2,782,583	958,808	5,939,415
August.....	3,090,403	2,702,456	13,830,259	18,618,887	2,579,023	672,227	5,099,530
September.....	3,463,481	2,262,187	7,491,472	15,721,388	1,748,681	776,724	3,964,037
October.....	4,424,131	3,076,467	4,124,684	14,871,203	1,241,203	1,629,814	3,355,145
November.....	4,369,570	4,266,677	4,996,213	17,127,841	1,207,545	3,421,328	3,788,470
December.....	4,162,734	5,974,861	9,712,301	16,966,933	1,661,393	5,046,619	6,140,316

Section 5.—Bounties.*

In cases where it is considered advisable for the Government to encourage the production of a particular commodity, bounties paid by the Government are recognized substitutes for protective duties. In the past they have been made use of by Canada to a considerable degree, but the only bounties which involved payments in the past few years were those on copper bars and rods, hemp, and bituminous coal mined in Canada and used in the manufacture of iron or steel. The Copper Bounty Act expired on June 30, 1931, and the Hemp Bounty Act expired on Dec. 31, 1932, and a statement of the bounties paid under these Acts was given on p. 662 of the 1934-35 Year Book. The bounty on bituminous coal was the outcome of a recommendation of the Royal Commission on Maritime Claims relating to the use of Canadian coal in the manufacture of iron and steel and the payments have been as follows:—

Paid in the fiscal year—

1930-31.....	273,148 tons at 49½c.....	\$ 135,209.23
1931-32.....	126,356 tons at 49½c.....	62,546.18
1932-33.....	118,783 tons at 49½c.....	58,797.54
1933-34.....	213,841 tons at 49½c.....	105,851.25
1934-35.....	336,849 tons at 49½c.....	166,740.02
1935-36.....	390,168 tons at 49½c.....	193,133.12
1936-37.....	564,695 tons at 49½c.....	279,523.96
1937-38 to Oct. 31, 1937.....	243,601 tons at 49½c.....	120,582.50

Totals.....2,267,441 tons.....\$1,122,383.80

*Revised by L. T. Lett, Department of Trade and Commerce.

Bounties have been paid at various times in the past on iron and steel, on lead, on crude petroleum, on manila fibre, on zinc, and on linen yarns, but the bounties on iron and steel ceased in 1911, on lead in 1918, on zinc in 1921, on linen yarns in 1923 and on crude petroleum in 1927. The total amounts paid in bounties on these commodities between 1896 and the date of expiration were: iron and steel, and manufactures of (1896-1912), \$16,785,827 (Canada Year Book 1915, p. 460); lead (1899-1918), \$1,979,216 for 1,187,169,878 lb.; zinc, \$400,000; linen yarns, \$17,523; manila fibre (1903-13), \$367,962; crude petroleum (1905-27), \$3,457,173 on 233,135,217 gallons. (For quantities of crude petroleum and bounties paid in each year, see table on p. 635 of the 1927-28 Year Book.) Total payments for expired bounties between 1896 and 1932, including the \$611,763 paid on copper bars and rods and the \$26,847 for hemp, aggregated \$23,646,311, which, with the \$1,122,384 paid for coal, make a total of \$24,768,694 to Oct. 31, 1937. The Year Book of 1915, pp. 459-461, gave a description of the bounties that had been payable since 1883, as well as tables showing, for each commodity, the quantities on which bounties were annually paid and the amounts of such bounties for the years 1896 to 1915, inclusive. For details of the bounties on zinc, see p. 635 of the 1927-28 Year Book.

Section 6.—Patents, Copyrights, and Trade Marks.*

Patents.—Letters patent, which in England have been in the gift of the Crown from the time of the Statute of Monopolies and earlier, are a purely statutory grant in Canada and have always been so. The earliest Act was one of Lower Canada, passed in 1824, wherein provision was made for the granting of patent rights to inventors who were British subjects and inhabitants of the province. Upper Canada passed its Act in 1826, and Nova Scotia and New Brunswick passed theirs at later dates. In 1849, after the Union, a consolidating Act was passed applying to both Upper and Lower Canada, and the B.N.A. Act assigned the granting of patents exclusively to the Parliament of Canada. The Dominion Patent Act of 1869 repealed the provincial Acts and has formed the basis of all succeeding Acts.

Letters patent are now issued subject to the provisions of c. 150, R.S.C., 1927 (as amended by c. 4, 1928, c. 34, 1930, c. 21, 1932, and c. 32, 1935), and application for protection relating to the same should be addressed to the Commissioner of Patents, Ottawa, Canada.

Invention means any new and useful art, process, machine, manufacture or composition of matter or any new and useful improvement in any art, process, machine, manufacture or composition of matter.

The growth of Canadian inventions is shown by the fact that the number of applications and total fees increased each year without a break from the beginning of the present century until the fiscal year ended Mar. 31, 1913, when 8,681 applications were received and the total fees amounted to \$218,125. In the fiscal year ended Mar. 31, 1937, there were 10,668 applications, with fees amounting to \$377,453, as shown in Table 21. Of the patents for 1937, 5,709 or 70 p.c. were issued to United States inventors, 703 to Canadians and 697 to residents of Great Britain and Ireland, while Germany with 443, France with 135, Sweden with 89, and Holland with 74 followed in the number of inventors to whom patents were issued. Applications for patents were distributed over the whole field of invention, but there was a notable increase in those related to the field of organic chemistry, especially in connection with artificial resins, dyes, chemicals for treating textiles, etc.

*Revised by J. T. Mitchell, Commissioner of Patents, Ottawa.

20.—Numbers of Canadian Patentees, by Provinces of Residence, for the fiscal years ended Mar. 31, 1926-37.

Province.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
Prince Edward Island..	2	5	3	1	3	3	2	Nil	1	2	2	2
Nova Scotia.....	30	19	24	16	17	14	18	14	16	9	17	2
New Brunswick.....	24	21	12	17	16	18	6	14	8	7	5	12
Quebec.....	272	320	298	293	282	265	272	257	236	227	207	201
Ontario.....	561	499	537	538	500	491	504	462	475	429	365	316
Manitoba.....	68	89	71	61	72	74	47	71	42	34	49	53
Saskatchewan.....	90	68	100	93	81	66	55	37	52	45	30	28
Alberta.....	95	82	88	98	71	76	63	35	48	43	52	32
British Columbia.....	150	129	152	148	126	101	117	113	104	89	65	56
Yukon and N.W.T.....	Nil	Nil	Nil	Nil	1	1	Nil	Nil	Nil	Nil	Nil	1
Canada.....	1,292	1,232	1,285	1,265	1,169	1,109	1,084	1,003	982	885	792	703

21.—Statistics of Patents Applied for, Granted, etc., fiscal years ended Mar. 31, 1932-37.

Item.	1932.	1933.	1934.	1935.	1936.	1937.
Applications for patents.....No.	11,940	10,145	9,267	9,404	12,580	10,668
Patents granted.....“	11,124	10,241	9,124	8,713	7,791	8,177
Certificates for renewal fees.....“	40	11	10	12	2	Nil
Caveats granted.....“	383	470	466	445	394	423
Assignments.....“	9,001	7,354	6,577	6,840	8,145	7,723
Fees received, net.....\$	444,110	393,067	362,146	353,460	386,542	377,453

Copyrights and Trade Marks.—Registration of copyright is governed by c. 32, R.S.C., 1927, and applications for protection relating to same should be addressed to the Commissioner of Patents, Ottawa, Canada.

The Copyright Act of 1921 (amended in 1923 and consolidated in c. 32, R.S.C., 1927) sets out in Sec. 4 the qualifications for a copyright, and in Sec. 5 its duration: “Copyrights shall subsist in Canada . . . in every original literary, dramatic, musical and artistic work, if the author was, at the date of the making of the work, a British subject, a citizen or subject of a foreign country which has adhered to the (Berne) Convention and the additional Protocol . . . or resident within His Majesty’s Dominions. The term for which the copyright shall subsist shall, except as otherwise expressly provided by this Act, be the life of the author and a period of fifty years after his death”.

Copyright protection is extended to records, perforated rolls, cinematographic films and other contrivances by means of which a work may be mechanically performed. The intention of the Act is to enable Canadian authors to obtain full copyright protection throughout all parts of His Majesty’s Dominions, foreign countries of the Copyright Union, and the United States of America, as well as in Canada.

The Trade Mark and Design Act (c. 201, R.S.C., 1927) was amended by c. 10 of the Statutes of 1928 bringing the Act into agreement with the terms of the Convention for the Protection of Industrial Property, as amended at The Hague in 1925 with regard to refusal to register certain trade marks. The renewal of expired trade mark registration was also provided for, while it was also enacted that in certain cases interested parties might apply to the Exchequer Court of Canada for the cancellation of a trade mark at any time within three years from its registration. The Unfair Competition Act, 1932 (22-23 Geo. V, c. 38), repealed all parts of the above Act relating to trade marks and all trade marks are now registered under and protected by the new Act.

22.—Statistics of Copyrights, Trade Marks, etc., fiscal years ended Mar. 31, 1932-37.

Item.	1932.	1933.	1934.	1935.	1936.	1937.
Copyrights registered.....No.	2,812	2,684	2,537	3,060	3,403	3,249
Trade marks registered.....“	2,186	2,950	2,065	1,686	1,574	2,068
Industrial designs registered.....“	371	409	331	430	363	336
Timber marks registered.....“	6	4	6	4	3	10
Assignments registered.....“	1,661	1,416	1,143	1,090	1,394	2,093
Fees received, net.....\$	81,138	146,274	67,196	72,217	68,220	86,396

Financial Statistics.—The following table gives the receipts, expenditures, and surplus on account of patents, copyrights, and trade marks for the fiscal years 1930-37.

23.—Receipts, Expenditures, and Surplus on Account of Patents, Copyrights, and Trade Marks, fiscal years ended Mar. 31, 1930-37.

NOTE.—For figures from 1921 to 1929, see the 1933 Year Book, p. 624.

Fiscal Year.	Receipts.	Expenditures.				Surplus.
		Civil Govern- ment.	Patent Record.	Contin- gencies.	Total.	
	\$	\$	\$	\$	\$	\$
1930.....	574,918	169,339	34,946	31,622	235,907	339,011
1931.....	559,646	174,458	35,000	32,000	241,458	318,188
1932.....	525,248	173,370	35,000	37,893	246,263	278,985
1933.....	539,341	155,465	25,000	24,829	205,293	334,047
1934.....	429,342	152,624	32,860	22,649	208,133	221,209
1935.....	425,677	145,859	26,259	23,630	195,748	229,928
1936.....	454,762	151,629	24,468	50,553	226,680	228,082
1937.....	463,850	155,607	28,697	45,725	230,029	233,821

Section 7.—Weights and Measures.*

The object of weights and measures administration is to maintain uniformity and accuracy in the use of the legal standards of the country in industry and commerce.

Prior to Confederation, the administration of weights and measures was in the hands of each Provincial Government but passed to the Dominion Government in 1867, under Sec. 91 of the British North America Act. Steps were then taken to simplify the standards in use and to establish uniformity throughout the Dominion.

What might be termed the principal Weights and Measures Act of Canada was passed in the session of 1872-73; its provisions closely followed English weights and measures law, but the system of weights and measures was greatly simplified. This Act established as the primary legal standards for Canada the imperial pound, gallon, and yard, but in place of the system of stones, quarters, hundredweights (112 lb.), and the long ton (2,240 lb.) it provided a decimal series of weights, 1, 2, 3, 5, 10, 20, 30, 50, 100 lb., and the short ton of 2,000 lb. The only exception to this was the continued use of the old French land measure, the arpent, in Quebec. The troy ounce of 480 grains and its decimal sub-multiples are the legal weights for the weighing of gold and precious metals. The metric system is legal for all transactions.

Many changes, deletions and additions have been made to the Act of 1873 by later legislation, but its principles remain unchanged. The latest legislation is the Weights and Measures Act (c. 212, R.S.C., 1927), as amended by c. 48, 1935.

The Weights and Measures Service was first administered by the Department of Inland Revenue, and offices were opened in all the principal centres of Canada

*Revised by E. O. Way, Director of Weights and Measures, Department of Trade and Commerce.

and equipped with standards and inspection equipment. In 1918 the Service was transferred to the Department of Trade and Commerce. For purposes of administration, the Dominion is divided into 19 districts, each in charge of a district inspector. The chief rules of administration are as follows:—

(a) Every new type of weighing and measuring device must be submitted to the Department at Ottawa for approval before being placed on the market.

(b) Every new machine must be inspected and stamped by an inspector before being sold or taken into use.

(c) Imported machines are held by the customs until release is approved by the nearest inspector.

(d) All inspections take place on the traders' premises, except where devices are brought to the inspection offices.

(e) Fees are charged for inspection and stamping, the schedule being defined by Order in Council, and all moneys so collected are paid into the Consolidated Revenue Fund of Canada.

The following table is a summary of the articles and machines inspected in the fiscal years ended Mar. 31, 1936 and 1937. The total revenues collected by the Service in the fiscal years ended 1936 and 1937 amounted to \$404,860 and \$399,626, respectively, while the expenses, including salaries, totalled \$327,229 and \$345,199, respectively.

24.—Inspections by the Weights and Measures Service, fiscal years ended Mar. 31, 1936 and 1937.

Article.	1936.				1937.			
	Sub-	Veri-	Re-	Per-	Sub-	Veri-	Re-	Per-
	mitted.	fied.	jected.	centage of Rejec- tions.	mitted.	fied.	jected.	centage of Rejec- tions.
	No.	No.	No.	p.c.	No.	No.	No.	p.c.
Weights (Dominion).....	102,905	95,495	7,410	7.20	102,756	98,898	3,858	3.75
Weights (metric).....	1,187	1,165	22	1.85	1,202	1,169	33	2.75
Measures of capacity.....	59,429	59,044	385	0.65	54,046	53,655	391	0.72
Measures of length.....	10,351	10,326	25	0.24	7,676	7,658	18	0.23
Milk-cans.....	56,851	56,807	44	0.08	70,757	70,577	180	0.25
Ice-cream containers.....	42,279	42,279	Nil	Nil	47,594	47,594	Nil	Nil
Measuring devices.....	50,276	42,789	7,487	14.84	49,339	41,629	7,710	15.61
Tank wagons.....	681	650	31	4.55	40,669	656	13	1.94
Babcock glassware.....	40,703	40,580	123	0.30	40,732	40,568	164	0.40
Weighing machines.....	183,301	159,297	24,004	13.10	183,439	158,866	24,573	13.40
Weighing machines (metric)	767	729	38	4.95	773	748	25	3.23
Domestic scales.....	14,413	14,179	234	1.62	14,811	14,615	196	1.32
Miscellaneous.....	16,913	16,885	28	0.16	12,140	12,105	35	0.29
Totals.....	580,056	540,225	39,831	6.86	585,934	548,738	37,196	6.35

Section 8.—Electricity and Gas Inspection.*

The Electricity and Gas Inspection Branch of the Department of Trade and Commerce administers three Acts: the Electricity Inspection Act (c. 22, 1928), the Gas Inspection Act (c. 82, R.S.C., 1927), and the Electricity and Fluid Exportation Act (c. 54, R.S.C., 1927).

The latest report of the Branch shows 518,415 electricity and gas meters tested in the fiscal year ended Mar. 31, 1937, as compared with 481,687 in the preceding year. The total revenue derived from electricity and gas inspection was \$349,365 as compared with an expenditure of \$326,439. The Branch also collected \$390,840 as export duty and licence fees under the provisions of the Electricity and Fluid Exportation Act; the cost of collecting this revenue was only \$376.

Other related statistics collected in the administration of the last-named Act will be found on p. 392, in the Water Power chapter of the Year Book. Here, how-

*Revised by J. L. Stiver, Director, Electricity and Gas Inspection Service, Department of Trade and Commerce.

ever, are given statistics, also collected by the Branch in the process of administration, showing a phenomenal increase in the number of consumers of electricity in the past 23 years from 505,597 to 1,839,420 (Table 25); a lesser increase in the gas meters in use from 267,454 in 1916 to 676,245 in 1937 (Table 26); and the number of cubic feet of gas sold in Canada from 1920 to 1937 classified as carburetted water gas, coal gas, coke oven gas, natural gas, acetylene gas, and butane (Table 27).

25.—Numbers of Electricity Meters in Use, fiscal years ended Mar. 31, 1915-37.

Fiscal Year.	Number.	Fiscal Year.	Number.	Fiscal Year.	Number.
1915.....	505,597	1923.....	1,046,831	1931.....	1,653,922
1916.....	517,629	1924.....	1,094,639	1932.....	1,704,197
1917.....	594,737	1925.....	1,165,664	1933.....	1,722,697
1918.....	661,403	1926.....	1,240,752	1934.....	1,720,997
1919.....	717,776	1927.....	1,314,428	1935.....	1,760,262
1920.....	743,468	1928.....	1,412,521	1936.....	1,788,522
1921.....	860,379	1929.....	1,499,872	1937.....	1,839,420
1922.....	945,599	1930.....	1,582,505		

26.—Numbers of Gas Meters in Use, by Kinds of Gas Consumed, fiscal years ended Mar. 31, 1916-37.

Fiscal Year.	Manu- factured Gas.	Natural Gas.	Acety- lene Gas.	Butane.	Total.	Fiscal Year.	Manu- factured Gas.	Natural Gas.	Acety- lene Gas.	Butane.	Total.
1916.....	199,514	67,940	—	—	267,454	1927...	462,496	90,302	358	—	553,156
1917.....	314,915	55,697	—	—	370,612	1928...	482,076	98,915	357	—	581,348
1918.....	325,244	88,795	—	—	414,039	1929...	504,500	107,504	116	—	612,120
1919.....	336,388	91,056	—	—	427,444	1930...	520,788	118,390	117	—	639,295
1920.....	350,777	85,004	513 ¹	—	436,294	1931...	530,909	125,550	67	205 ¹	656,731
1921.....	361,479	98,494	577	—	460,550	1932...	540,277	128,194	66	230	668,767
1922.....	366,840	101,785	430	—	469,055	1933...	532,139	128,282	80	285	660,786
1923.....	379,459	102,007	438	—	481,904	1934...	522,484	134,710	49	369	657,612
1924.....	390,548	105,804	425	—	496,777	1935...	517,948	139,763	14	638	655,363
1925.....	405,471	106,861	404	—	512,736	1936...	505,946	158,827	14	1,108	665,895
1926.....	443,067	85,752	425	—	529,244	1937...	506,075	169,132	3	1,035	676,245

¹ First time reported.

27.—Quantity of Each Kind of Gas Sold in Canada, fiscal years ended Mar. 31, 1920-37.

Fiscal Year.	Carburetted Water Gas.	Coal Gas.	Coke Oven Gas.	Natural Gas.	Acetylene Gas.	Butane.	Total.
	M cu. ft.	M cu. ft.	M cu. ft.	M cu. ft.	M cu. ft.	M cu. ft.	M cu. ft.
1920.....	4,487,512	6,787,370	—	17,117,100	1,670	—	28,393,652
1921.....	5,331,442	7,096,222	—	1	1	—	—
1922.....	4,668,392	8,433,861	—	11,289,592	1,005	—	24,392,850
1923.....	6,632,962	7,637,114	132 ²	12,238,837	1,165	—	26,510,210
1924.....	5,214,843	8,042,882	3,189	14,866,619	1,194	—	28,128,727
1925.....	5,254,803	7,824,193	91,628	10,525,604	1,266	—	23,697,494
1926.....	4,835,613	8,149,894	1,449,795	13,004,470	1,211	—	27,440,983
1927.....	5,804,504	8,405,556	1,049,978	17,863,366	1,247	—	33,124,651
1928.....	6,883,635	7,488,965	1,680,237	20,365,049	1,325	—	36,419,211
1929.....	4,550,829	6,273,275	6,097,920	25,491,446	647	—	42,414,117
1930.....	4,456,997	5,802,653	8,153,473	31,880,845	847	—	50,294,815
1931.....	4,214,554	6,249,190	7,792,047	28,534,604	875	9,137 ²	46,800,407
1932.....	4,267,074	6,385,622	7,235,463	27,244,803	790	6,600	45,140,352
1933.....	3,821,680	7,491,005	5,908,231	27,342,696	4,982	11,930	44,580,524
1934.....	3,349,893	7,652,344	5,331,047	26,423,633	4,737	13,268	42,774,922
1935.....	2,256,568	8,378,714	6,267,577	25,051,664	5,729	12,576	41,972,828
1936.....	1,972,511	7,876,353	6,637,103	29,334,639	6,774	16,976	45,844,356
1937.....	1,969,493	6,894,858	7,685,207	30,291,438	8,066	19,781	46,868,843

¹ None reported.

² First time reported.

Section 9.—Merchandising and Service Establishments.*

A comprehensive census of business carried on by trading and service establishments was undertaken for the first time in 1931 in connection with the Seventh Decennial Census. A partial survey of trading establishments had been made in 1924, but the results of this initial survey, while indicative of the extent of domestic trade, suffered from the incompleteness of the canvass made. The Census of Merchandising and Service Establishments, 1931, covered not only the operations of retail and wholesale merchandising establishments in 1930 but also those of service establishments, including hotels. In addition, information was collected to show the initial channels (manufacturers' wholesale branches, other wholesalers, retailers, industrial consumers, export sales, etc.) through which goods manufactured in Canada are distributed and the proportion of the total value of production sold through each channel. The results of the census have been published in several series of reports and in Volumes X and XI of the Census of 1931.

Annual Statistics.—An outgrowth of the Census of Merchandising and Service Establishments, 1931, has been an annual survey of wholesale and retail trade based on reports from larger concerns in the respective fields. In the case of wholesale trade, the annual survey is confined to wholesalers proper and reports are secured from firms which had a volume of sales of \$100,000 or more in 1930 together with firms of a similar size which have commenced business since 1930. The survey of retail trade is based on the reports of all chain stores and of independent stores with a turnover of \$20,000 or more in 1930. Reports are also secured from newly-established independent stores. While the annual figures for merchandising are not based on such a comprehensive survey as that made in connection with the decennial census, they provide the most reliable indicators available of recent trends in merchandise trade as they cover more than two-thirds of the dollar volume of business.

Monthly Statistics.—Monthly indexes of retail sales, based on returns from department stores, chain stores, and a representative sample of independent firms, are now available for the period commencing January, 1929. A description of these indexes appears in Subsection 2 of this chapter. Monthly indexes of wholesale trade are also available, although for the shorter period beginning January, 1935. This series is shown in Table 30, Subsection 1, below.

Subsection 1.—Wholesale and Other Bulk or Non-Retail Merchandising.

Under this heading there appeared at pp. 670-672 of the 1934-35 Year Book a summary of trade in the wholesale field, as derived from the Census of Merchandising and Service Establishments, and tables showing, for 1930, bulk merchandising statistics (1) by provinces, and (2) by type of distributor. The interested reader is referred to that material which is the latest available. Supplementary data for the chief cities in Canada are given below.

Wholesale Trade in Canadian Cities.—Summary figures for all wholesale establishments and for wholesalers proper in cities of over 20,000 population are shown for 1930 in Table 28. Included in the figures for all wholesale establishments are data for agents, brokers, manufacturers' sales branches, and other specialized wholesale agencies. Wholesalers proper embrace only regular wholesale houses, such as wholesale merchants, importers, and exporters. The importance of such cities as Montreal, Toronto, Winnipeg, and Vancouver as wholesale centres is clearly shown by the figures in Table 28.

* Prepared by Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics. For a list of publications of this Branch, see Chapter XXIX, Section 1, under "Internal Trade".

28.—Bulk Merchandising (Wholesale and Other Non-Retail) in Cities of 20,000 Population or Over, 1930.

City and Province.	Population, 1931.	All Establishments.					Wholesalers Proper.	
		Establishments.	Employees.	Salaries and Wages.	Net Sales (1930).	Stocks on Hand, End of Year (at Cost).	Establishments.	Net Sales (1930).
	No.	No.	No.	\$	\$	\$	No.	\$
Montreal, Que.....	818,577	1,838	21,400	35,649,800	766,332,800	68,043,000	1,035	287,176,800
Toronto, Ont.....	631,207	1,835	19,891	33,743,000	691,738,400	60,106,000	971	227,375,400
Vancouver, B.C....	246,593	761	5,712	9,757,200	211,111,800	23,059,900	341	78,382,100
Winnipeg, Man.....	218,785	768	8,379	14,215,600	635,722,200	25,522,100	314	72,862,800
Hamilton, Ont.....	155,547	191	1,778	2,904,800	47,755,800	5,578,800	119	21,314,200
Quebec, Que.....	130,594	249	2,416	3,167,800	75,180,800	6,981,000	144	33,497,800
Ottawa, Ont.....	126,872	199	1,660	2,447,600	41,592,300	5,587,600	114	26,254,000
Calgary, Alta.....	83,761	261	2,818	4,916,100	92,127,900	11,715,600	114	30,499,000
Edmonton, Alta....	79,197	200	1,832	3,115,700	63,940,100	8,193,500	82	24,701,200
London, Ont.....	71,148	147	1,269	2,145,000	32,059,000	3,565,000	83	15,503,400
Windsor, Ont.....	63,108	92	725	1,155,400	19,141,800	1,813,700	56	9,819,700
Verdun, Que.....	60,745	6	15	22,400	592,700	28,900	6	592,700
Halifax, N.S.....	59,275	163	1,462	2,181,600	42,676,900	3,998,200	84	20,439,600
Regina, Sask.....	53,209	148	1,991	3,260,700	46,877,500	9,713,200	60	17,637,300
Saint John, N.B....	47,514	181	1,964	2,889,500	49,538,200	4,974,800	83	17,995,700
Saskatoon, Sask....	43,291	115	1,426	2,283,500	39,312,400	6,323,200	51	17,316,000
Victoria, B.C.....	39,082	65	487	725,700	13,704,000	1,839,400	36	8,114,300
Three Rivers, Que..	35,450	30	165	215,300	5,083,500	866,700	16	2,700,700
Kitchener, Ont....	30,793	51	245	395,500	7,391,400	624,500	32	3,428,400
Brantford, Ont....	30,107	36	300	417,200	7,184,400	879,200	22	3,583,100
Hull, Que.....	29,433	11	53	75,200	1,138,500	86,200	6	310,300
Sherbrooke, Que...	28,933	41	355	540,500	9,452,200	1,145,100	20	7,146,600
Outremont, Que....	28,641	9	167	292,000	4,572,300	814,700	5	1,127,500
Fort William, Ont..	26,277	41	433	650,400	15,627,100	2,760,100	27	7,897,900
St. Catharines, Ont.....	24,753	25	110	158,700	2,641,200	237,500	12	1,378,300
Westmount, Que....	24,235	7	173	302,400	2,059,200	426,100	5	1,208,000
Kingston, Ont.....	23,439	39	280	407,400	7,351,100	1,400,700	29	4,582,100
Oshawa, Ont.....	23,439	19	256	1,039,500	16,689,600	226,800	8	1,021,800
Sydney, N.S.....	23,069	31	165	247,500	6,857,000	600,900	20	5,316,200
Sault Ste. Marie, Ont.....	23,082	20	139	195,300	4,997,100	501,600	14	3,433,000
Peterborough, Ont..	22,327	25	136	188,100	3,874,100	291,200	13	2,031,400
Moose Jaw, Sask....	21,299	37	320	497,700	9,950,700	1,048,400	19	5,969,900
Guelph, Ont.....	21,075	21	138	196,300	3,430,600	501,300	16	2,580,800
Glace Bay, N.S....	20,706	6	18	18,000	478,700	73,200	4	386,800
Moncton, N.B.....	20,689	36	287	342,000	6,195,800	911,300	16	3,254,200

Annual Wholesale Statistics.—In constructing an annual index of wholesale sales, the chief objective has been to obtain the most representative measure of wholesale trade and particularly of the pre-retail business. This annual index is confined to wholesalers proper. Wholesalers proper are mainly wholesale merchants, importers, exporters, and supply and machinery distributors. From this group are excluded such distributors as agents and brokers, manufacturers' sales branches and other types of specialized distributors. However, in order to attain the above-mentioned objective of a representative measure of wholesale trade, it was later found to be necessary to make certain alterations in the classifications used in presenting the results of the Census of Merchandising and Service Establishments, 1931. These alterations were referred to at p. 612 of the 1937 Year Book.

Total sales and indexes are shown in Table 29, by provinces and kinds of business; the 1930 figures are those of the census, while those for 1931-35 are estimates based on the results of the annual surveys. Wholesale trade in Canada during 1936 totalled \$1,181,543,000 compared with \$1,370,066,000 in 1930. While sales were still 13.8 p.c. below the 1930 level, the improvement which commenced during 1933 was continued, an increase of 9.3 p.c. over the amount of trade recorded for 1935 bringing the index for 1936 more than 5 p.c. above that for 1931. The largest increases in sales in 1936 were reported by firms dealing in industrial or building

equipment and supplies which had suffered the most severe losses in trade between 1930 and 1933. To what extent movements in the value of wholesale sales are due to changes in prices or to variations in the physical volume of goods handled cannot be determined accurately.

29.—Total Sales and Indexes of Sales made by Wholesalers Proper, by Provinces and Kinds of Business, 1930, 1933, 1935, and 1936.

Province or Kind of Business.	Total Net Sales.				Indexes of Sales. (1930=100.)						Per Cent Change, 1935-36.
	1930.	1933.	1935.	1936.	1930.	1931.	1932.	1933.	1935.	1936.	
	\$'000	\$'000	\$'000	\$'000							
Prince Edward Island...	7,518	4,662	5,309	6,297	100-0	83-5	57-2	62-0	70-6	83-8	+18-6
Nova Scotia.....	46,464	32,812	39,031	42,385	100-0	85-6	73-5	70-6	84-0	91-2	+ 8-6
New Brunswick.....	38,320	25,192	29,761	32,530	100-0	85-9	68-9	65-7	77-7	84-9	+ 9-3
Quebec.....	386,229	254,696	299,999	327,034	100-0	83-7	69-4	65-9	77-7	84-7	+ 9-0
Ontario.....	471,615	324,825	392,730	431,477	100-0	84-4	70-9	68-9	83-3	91-5	+ 8-9
Manitoba.....	98,960	64,461	80,099	87,473	100-0	77-7	68-5	65-1	80-9	88-3	+ 9-2
Saskatchewan.....	90,210	48,555	59,206	64,025	100-0	66-2	59-5	53-8	65-6	70-9	+ 8-1
Alberta.....	99,333	61,872	72,436	78,790	100-0	74-6	67-2	62-3	72-9	79-3	+ 8-8
British Columbia.....	131,414	83,418	102,171	111,532	100-0	81-9	64-8	63-5	77-7	84-9	+ 9-2
Totals.....	1,370,063¹	900,496	1,039,712	1,181,543	100-0	81-6	68-7	65-7	78-9	86-2	+ 9-3
Amusement, photograph- ic and sporting goods..	4,278	2,464	2,933	3,354	100-0	82-9	67-7	57-6	68-6	78-4	+14-4
Automotive.....	20,990	13,473	16,913	18,875	100-0	84-3	65-3	64-2	80-6	89-9	+11-6
Chemicals and paints...	8,387	7,743	9,852	10,702	100-0	84-1	74-7	92-3	117-5	127-6	+ 8-6
Drugs and drug sundries.	27,973	22,139	24,814	26,644	100-0	96-3	85-2	79-1	88-7	95-2	+ 7-4
Coal and coke.....	50,252	42,881	52,227	55,748	100-0	87-9	83-9	85-3	103-9	110-9	+ 6-7
Dry goods and apparel..	102,356	64,396	75,450	79,122	100-0	79-0	65-3	62-9	73-7	77-3	+ 4-9
Electrical.....	22,982	9,973	14,940	19,170	100-0	78-4	52-2	43-4	65-0	83-4	+28-3
Farm supplies.....	16,037	8,719	11,153	10,483	100-0	87-2	64-8	54-4	69-5	65-4	- 6-0
Foods.....	540,820	377,670	444,529	482,819	100-0	83-4	70-6	69-8	82-2	89-3	+ 8-6
Groceries.....	223,838	184,436	203,245	217,713	100-0	87-7	79-4	82-4	90-8	97-3	+ 7-1
Dairy and poultry pro- ducts.....	48,771	32,185	36,273	40,860	100-0	81-4	69-4	66-0	74-4	83-8	+12-6
Fruits and vegetables.	99,102	63,176	75,480	83,236	100-0	83-5	70-1	63-7	76-2	84-0	+10-3
Meats and fish.....	169,109	97,873	129,531	141,010	100-0	78-4	59-6	57-9	76-6	85-4	+ 8-9
Furniture and house furnishings.....	13,632	7,293	9,404	10,163	100-0	76-7	58-0	53-5	69-0	74-6	+ 8-1
General merchandise....	13,478	8,668	11,097	12,886	100-0	78-1	69-0	64-3	82-3	95-6	+16-1
Hardware.....	65,943	38,025	49,260	56,075	100-0	76-5	59-4	57-7	74-7	85-0	+13-8
Jewellery and optical goods.....	10,858	6,935	9,711	11,374	100-0	85-8	67-8	63-9	89-4	104-8	+17-1
Leather and leather goods.....	7,877	5,325	6,512	6,854	100-0	76-8	67-2	72-2	88-3	92-9	+ 5-3
Lumber and building materials.....	51,872	18,912	27,584	34,234	100-0	73-8	44-1	36-5	53-2	66-0	+24-1
Machinery, equipment and supplies.....	59,321	21,789	33,757	39,696	100-0	55-1	40-7	36-7	56-9	66-9	+17-6
Metals and metal work..	14,059	6,817	11,122	12,821	100-0	71-2	52-0	48-5	79-1	91-2	+15-3
Paper and paper products	22,462	17,263	20,103	21,287	100-0	92-7	82-3	76-9	89-5	94-8	+ 5-9
Petroleum products.....	230,169	163,315	178,367	189,272	100-0	83-8	78-0	71-0	77-5	82-2	+ 6-1
Plumbing and heating equipment and supplies.	14,512	5,508	7,554	9,078	100-0	75-5	44-1	38-0	52-1	62-6	+20-2
Tobacco and confection- ery.....	45,870	32,165	38,568	41,403	100-0	89-1	76-5	70-1	84-1	90-3	+ 7-4
Waste materials.....	10,118	6,335	9,721	12,824	100-0	78-7	52-3	62-6	96-1	126-7	+31-9
All other.....	16,318	12,688	15,171	16,659	100-0	86-2	79-6	77-8	93-0	102-1	+ 9-8

¹ The difference between this total and that shown under the heading of wholesalers proper on pp. 671-672 of the 1934-35 Year Book is due to a reclassification of some firms as between wholesalers proper and other bulk distributors.

Monthly Indexes of Wholesale Sales.—Commencing with January, 1935, the Dominion Bureau of Statistics has published monthly indexes of wholesale sales based on returns submitted by approximately 200 wholesale firms comprising a representative sample of nine different lines of business. The base on which these indexes were first computed was that of average monthly sales in 1935 equalling 100; the results of the annual surveys of wholesale trade were then utilized in reducing the monthly indexes to the 1930 base in order that they should conform

with other series. Since the monthly indexes are based upon a smaller coverage of sales than that secured for the annual census, these results cannot be expected to have the accuracy of the more exhaustive survey. The monthly indexes do, however, give a fair indication of current trends in wholesale trade.

Dollar volume of wholesale sales averaged 10.1 p.c. higher in 1937 than in 1936 for the nine lines of business for which monthly indexes are computed. The hardware group registered the best increase at 16.7 p.c., followed by tobacco and confectionery at 12.8 p.c. Wholesalers in the grocery trade reported the smallest increase at 8.0 p.c.

All sections of the country reported increased sales in 1937 compared with the preceding year. The gain in British Columbia was particularly impressive at 16.8 p.c. and those in the Maritime Provinces and Quebec were only slightly smaller at 14.2 p.c. and 13.5 p.c., respectively. Ontario sales were up 8.5 p.c., while the gain for the Prairie Provinces was 5.6 p.c.

30.—Unadjusted Index Numbers of Wholesale Sales, by Economic Divisions and by Kinds of Business, January, 1935, to December, 1937.

(Average for 1930=100.)

Year and Month.	Wholesale Trade. (Composites of nine lines of business.)						Selected Kinds of Business.							
	Canada	Maritime Prov- inces.	Que.	Ont.	Prairie Prov- inces.	B.C.	Auto- motive Sup- plies.	Drugs	Foot- wear.	Dry Goods	Gro- ceries.	Fruits and Vege- tables.	Hard- ware.	
1935.														
January.....	58.9	57.4	51.7	69.3	53.7	56.6	49.5	82.3	34.5	49.1	74.0	53.3	45.6	
February.....	63.2	57.4	61.1	69.2	58.0	63.4	51.7	85.4	53.0	59.7	74.2	61.6	52.1	
March.....	72.6	72.5	72.3	78.8	64.5	72.8	60.8	90.7	94.3	73.5	80.6	69.1	69.6	
April.....	76.8	78.4	76.9	83.4	68.6	74.6	78.9	87.1	96.2	73.7	82.7	82.8	77.1	
May.....	83.7	90.3	85.2	90.4	73.7	80.4	82.9	87.0	90.1	72.1	91.7	95.3	88.1	
June.....	79.8	79.7	79.1	85.9	71.9	79.7	77.6	82.8	77.5	64.3	90.7	89.6	80.6	
July.....	82.5	87.3	74.0	88.0	79.6	84.4	81.7	86.7	60.4	52.5	102.0	87.2	79.4	
August.....	84.8	82.1	75.9	86.2	87.1	87.4	92.9	88.3	82.4	72.8	100.1	77.9	82.8	
September.....	89.6	92.5	93.0	88.8	86.9	84.1	107.8	93.5	101.9	97.8	99.9	77.8	85.8	
October.....	94.2	97.7	98.1	93.0	91.5	88.3	120.6	97.6	119.1	94.4	108.5	76.3	88.8	
November.....	84.7	90.4	87.0	84.0	79.1	87.2	93.0	95.9	121.6	81.9	97.4	67.4	81.9	
December.....	75.9	77.8	78.0	82.6	66.2	73.4	69.8	87.1	120.1	62.5	87.8	76.2	64.7	
Averages, 1935	78.9	80.3	77.7	83.3	73.4	77.7	80.6	88.7	87.6	71.2	90.8	76.2	74.7	
1936.														
January.....	61.6	59.6	54.1	68.3	56.8	67.6	56.3	86.7	36.8	48.2	77.8	54.8	48.8	
February.....	65.5	62.0	62.7	70.4	58.1	74.4	50.0	88.7	55.4	59.4	79.8	58.0	53.8	
March.....	76.2	74.5	77.0	80.0	68.6	79.7	65.6	94.7	103.6	77.9	83.7	73.6	74.1	
April.....	81.8	87.7	81.8	85.4	73.1	85.8	84.7	93.1	88.6	76.6	89.2	84.1	85.7	
May.....	86.9	89.6	86.9	93.2	76.7	89.6	92.0	90.6	100.0	75.1	93.1	97.7	95.3	
June.....	89.1	93.5	90.3	94.3	79.5	89.7	87.1	91.6	92.2	69.3	97.6	108.8	94.5	
July.....	90.3	95.6	92.7	95.5	87.1	98.4	83.8	92.4	67.2	51.9	112.1	103.2	86.3	
August.....	90.1	87.8	77.9	89.3	96.9	92.6	101.7	88.6	95.1	74.6	106.1	89.0	88.2	
September.....	101.2	105.9	101.2	97.9	102.5	95.9	128.7	103.7	129.0	107.2	110.0	92.3	103.5	
October.....	103.8	107.7	106.3	98.9	104.7	99.2	138.7	109.8	162.9	102.8	115.4	83.0	110.8	
November.....	90.2	98.2	93.5	88.5	82.1	98.2	110.9	104.4	109.9	87.2	102.3	70.2	93.3	
December.....	85.6	92.4	78.3	91.0	78.6	93.4	82.9	96.7	86.4	66.3	99.0	86.6	85.7	
Averages, 1936	85.2	87.9	82.4	87.7	80.4	88.7	90.2	95.1	93.9	74.7	97.2	83.4	85.0	
1937.														
January.....	70.0	72.5	62.5	76.5	62.1	81.7	62.5	96.2	51.4	51.4	86.5	65.0	61.7	
February.....	73.8	72.7	71.5	78.4	65.9	81.8	61.1	103.2	76.6	70.7	83.9	68.6	68.8	
March.....	91.4	93.0	89.7	91.5	84.3	104.8	76.1	104.8	103.8	85.1	99.8	89.7	103.5	
April.....	94.4	102.5	96.3	93.9	84.6	105.5	98.8	104.5	117.2	84.4	96.7	98.0	118.5	
May.....	96.5	103.0	100.3	99.3	82.3	108.9	105.1	98.3	111.8	84.0	100.8	108.7	113.0	
June.....	100.4	107.6	103.0	105.5	85.1	111.5	96.4	102.6	98.7	79.3	109.6	116.3	113.6	
July.....	97.4	107.3	87.5	99.5	91.0	116.8	89.9	101.8	61.1	59.6	119.1	102.0	102.3	
August.....	98.2	100.8	92.3	96.8	95.9	110.6	107.0	104.8	117.2	88.2	111.4	90.2	102.0	
September.....	113.3	123.6	118.9	109.2	108.5	112.4	143.1	122.2	160.2	118.8	123.3	102.3	116.2	
October.....	107.4	116.7	116.4	105.6	97.5	108.5	134.4	116.9	159.5	112.5	117.5	88.9	111.4	
November.....	96.6	108.0	98.9	94.9	88.6	104.2	104.9	111.4	93.7	92.6	111.7	79.9	96.8	
December.....	86.2	96.5	85.6	91.6	73.4	96.2	87.5	104.4	96.8	66.7	99.0	85.0	82.2	
Averages, 1937	93.8	100.4	93.6	95.2	84.9	103.6	97.2	105.9	104.0	82.8	104.9	91.2	99.2	

Subsection 2.—Retail Trade and Service Establishments.*

As complete a review of the retail merchandising and service statistics as will appear in the Year Book from the Census of Merchandising and Service Establishments, 1931, was given at pp. 673-690, inclusive, of the 1934-35 Year Book. This review gave detailed analyses of such trade, annual net sales and employees engaged, by provinces, business groups and kinds of business, and by manner of operation (*i.e.*, independents, two-store multiples, three-store multiples, voluntary and other types of chains, etc.). Since these statistics will stand until the next census is taken, it has been considered unnecessary to reprint them in this edition of the Year Book. In this edition, therefore, the only table reprinted, and this merely in part, is that showing the retail trade in Canadian cities, which appears now as Table 31. There is, however, additional new matter presented dealing with: (1) total sales and indexes of sales, by provinces and kinds of business, 1930-36 (figures for 1930 being from the census and those for other years estimates based upon returns secured from the annual surveys); (2) the growth of the chain store; (3) the new monthly index of retail sales which has lately assumed permanent form and in which corrections have been made to allow for variations in number of business days and for seasonal changes; and (4) detailed statistics showing the importance of the motion picture industry, recently made available as a result of a special study of this field.

Retail Merchandise Trade in Canadian Cities.—The retail merchandise trade in Canadian cities of over 20,000 population during 1930, according to the Census of 1931, is shown in Table 31.† The cities are arranged in descending order according to their 1931 census populations. A notable feature of these figures is the wide variation in different cities in the relationship between population and retail sales. In general, per capita sales are high for cities which form distributing centres for large or populous areas, while such sales are lowest in residential or industrial cities adjacent to larger centres, as in the case of Verdun, Outremont, Westmount, and Hull.

* A review of retail trade for the period 1923-30 was given at pp. 637-639 of the 1936 Year Book. This was summarized from a special study report "A Decade of Retail Trade" published in bulletin form in 1935 by the Internal Trade Branch of the Dominion Bureau of Statistics.

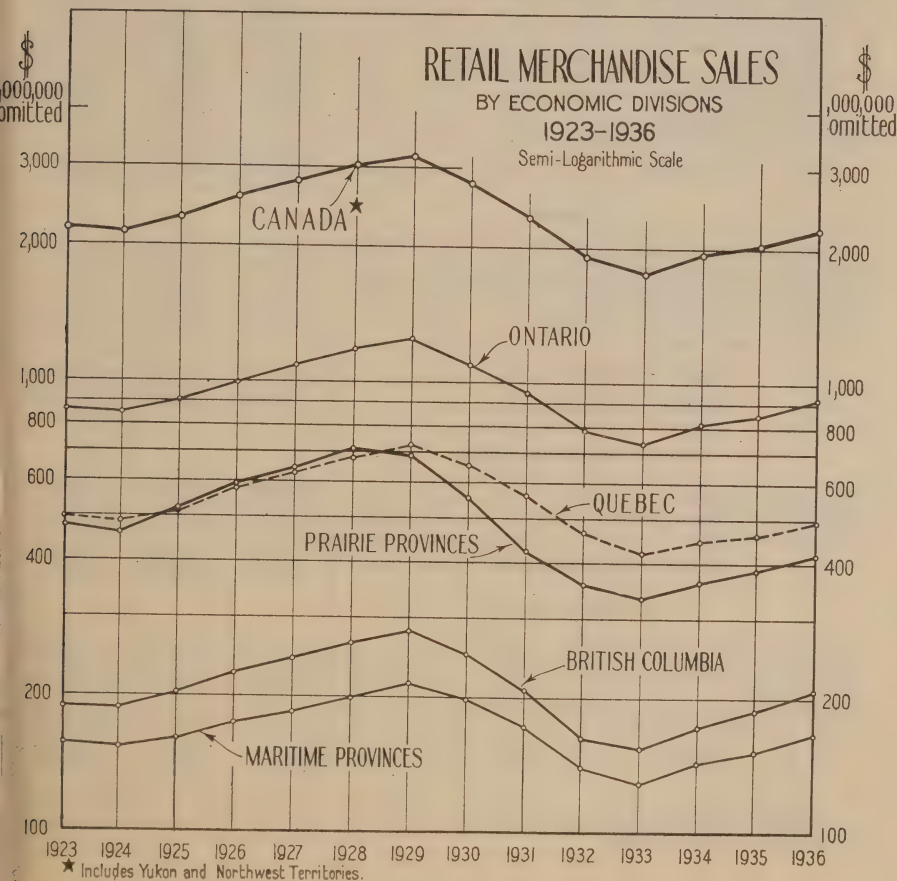
† A similar table showing retail merchandise trade in cities of over 10,000 population was published at pp. 684-685 of the 1934-35 Year Book.

31.—Retail Merchandise Trade in Cities of 20,000 Population or Over, 1930.

City and Province.	Population, 1931.	Establish- ments.	Full-Time Employees.			Net Sales.	Stocks on Hand, End of Year (at Cost).
			Male.	Female.	Salaries and Wages.		
	No.	No.	No.	No.	\$	\$	\$
Montreal, Que.....	818,577	11,959	27,144	12,622	40,171,900	369,471,200	52,939,200
Toronto, Ont.....	631,207	8,725	23,601	13,473	44,548,300	372,682,900	46,777,000
Vancouver, B.C.....	246,593	3,845	7,911	4,268	13,516,200	122,830,900	18,660,700
Winnipeg, Man.....	218,785	2,486	8,164	5,513	15,379,600	131,480,200	15,542,700
Hamilton, Ont.....	155,547	2,117	3,831	2,082	6,528,500	68,512,800	9,605,200
Quebec, Que.....	130,594	1,742	3,824	1,437	4,696,900	48,172,200	9,555,600
Ottawa, Ont.....	126,872	1,525	3,896	1,978	6,205,700	59,702,200	10,449,800
Calgary, Alta.....	83,761	1,136	2,686	1,262	4,809,600	43,359,800	7,143,100
Edmonton, Alta.....	79,197	1,054	2,235	1,176	4,011,200	37,555,900	6,202,600
London, Ont.....	71,148	1,074	2,135	985	3,426,300	35,596,000	4,883,600
Windsor, Ont.....	63,108	903	1,938	615	3,300,600	30,122,400	4,539,000
Verdun, Que.....	60,745	558	938	297	1,163,300	12,774,300	1,678,100
Halifax, N.S.....	59,275	900	1,662	1,125	2,709,300	29,843,200	4,190,300
Regina, Sask.....	52,209	569	2,016	951	3,407,200	33,105,600	5,555,800
Saint John, N.B.....	47,514	822	1,465	846	2,160,100	21,435,100	3,233,700
Saskatoon, Sask.....	43,291	546	1,536	760	2,639,500	25,364,200	4,277,200

31.—Retail Merchandise Trade in Cities of 20,000 Population or Over, 1930—concl.

City and Province.	Popula- tion, 1931.	Estab- lish- ments.	Full-Time Employees.			Net Sales.	Stocks on Hand, End of Year (at Cost).
			Male.	Female.	Salaries and Wages.		
	No.	No.	No.	No.	\$	\$	\$
Victoria, B.C.	39,082	809	1,790	914	2,944,900	27,108,500	4,990,900
Three Rivers, Que.	35,450	456	719	312	960,100	10,079,700	1,857,200
Kitchener, Ont.	30,793	399	725	343	1,211,300	13,770,500	2,005,700
Brantford, Ont.	30,107	451	809	375	1,230,300	13,966,900	1,937,100
Hull, Que.	29,433	443	645	133	663,800	7,776,900	1,319,300
Sherbrooke, Que.	28,933	428	737	258	977,400	10,959,900	2,050,600
Outremont, Que.	28,641	129	365	45	455,100	4,306,700	487,900
Fort William, Ont.	26,277	333	544	300	830,300	10,003,300	1,723,000
St. Catharines, Ont.	24,753	437	802	383	1,328,500	14,664,800	2,340,200
Westmount, Que.	24,235	128	504	116	727,500	6,830,100	600,500
Kingston, Ont.	23,439	376	858	328	1,214,500	12,873,200	2,079,000
Oshawa, Ont.	23,439	278	584	159	802,900	8,498,500	1,192,900
Sydney, N.S.	23,089	340	445	258	637,100	8,136,700	1,483,900
Sault Ste. Marie, Ont.	23,082	357	436	231	682,400	9,984,500	1,783,400
Peterborough, Ont.	22,327	353	688	317	969,500	11,132,500	1,706,600
Moose Jaw, Sask.	21,299	308	611	248	993,100	9,688,400	1,574,600
Quelph, Ont.	21,075	309	497	241	792,200	9,194,400	1,388,200
Glouce Bay, N.S.	20,706	232	200	156	277,300	4,268,100	680,000
Moncton, N.B.	20,689	302	920	699	1,621,700	20,751,400	2,290,700



Annual Retail Statistics.—As in the case of wholesale merchandising, annual statistics of retail sales are based on the complete census covering 1930, supplemented by an annual survey of all the more important retail establishments, such establishments having accounted for over two-thirds of the total value of sales in 1930. In Table 32, therefore, the figures for 1930 are the results of the comprehensive census, while the figures for later years are estimates calculated from the annual surveys.

It is impossible to measure accurately the effect of the general decline in prices as a factor in the decrease in the total sales from 1930 to 1933. It probably was the principal

32.—Total Sales and Indexes of Sales of Retail Merchandise

No.	Province or Group and Kind of Business.	Total Sales.		
		1930.	1932.	1933.
		\$'000	\$'000	\$'000
1	Prince Edward Island ¹	13,774	9,286	8,905
2	Nova Scotia ¹	99,520	74,697	68,839
3	New Brunswick ¹	84,372	57,024	52,375
4	Quebec ¹	651,138	465,335	422,297
5	Ontario ¹	1,099,990	790,149	741,630
6	Manitoba ¹	189,244	131,675	122,045
7	Saskatchewan ¹	189,181	112,025	103,091
8	Alberta ¹	176,537	115,906	109,074
9	British Columbia ¹	248,598	163,771	155,747
10	Yukon and Northwest Territories ¹	3,216	2,198	1,765
	Canada¹.....	2,755,570	1,922,066	1,785,768
	Food Group.			
11	Bakery product stores (manufacturing bakeries not included).....	11,028	8,002	7,727
12	Candy and confectionery stores.....	54,176	36,661	33,010
13	Dairy product dealers (other than manufacturing dairies).....	37,174	28,317	26,451
14	Fruit and vegetable stores.....	16,293	13,346	12,394
15	Grocery and combination stores.....	405,403	315,825	297,307
16	Meat markets (including sea foods).....	83,026	53,595	50,090
17	Other food stores.....	8,376	5,481	5,039
	Totals, Food Group.....	615,476	461,227	432,018
18	Country General Stores.....	228,804	158,634	151,233
	General Merchandise Group.			
19	Department stores.....	355,259	253,831	241,850
20	Dry goods stores.....	31,706	22,976	21,000
21	General merchandise stores.....	20,366	14,071	13,217
22	Variety stores.....	44,212	39,627	37,256
	Totals, General Merchandise Group.....	451,543	330,505	313,323
	Automotive Group.			
23	Motor vehicle dealers.....	253,608	136,370	129,889
24	Accessories, tires and batteries.....	10,956	7,732	7,200
25	Filling stations ¹	66,449	61,769	58,428
26	Garages.....	47,560	34,208	30,230
27	Other automotive establishments (including motorcycles, bicycles and supplies).....	3,386	2,018	1,899
	Totals, Automotive Group¹.....	381,959	242,097	227,646

¹ Figures for filling stations for years subsequent to 1930 have been revised and are estimated on basis of gallonage data and retail gasoline prices. The changes affect the provincial totals and automotive group totals for the same years.

factor in the food and apparel groups. On the other hand, the prices of more durable goods have not declined so much as food prices, so that the greater reduction in sales of groups handling durable goods is, no doubt, due much more to reduced volume.

The improvement in retail trade, evident in Canada since the spring months of 1933, was continued in 1936 when the value of sales was 7.2 p.c. greater than in the preceding year and 23 p.c. greater than in 1933. The index of retail sales for 1936 on the base 1930 equals 100 stands at 79.9. Increases over 1935 were recorded in all provinces, these increases ranging from 5.5 p.c. in Alberta to 14.6 p.c. in Prince Edward Island.

Trade, by Provinces and Kinds of Business, 1930, 1932-36.

Total Sales.			Indexes of Retail Sales. (1930=100.)						Per Cent Change, 1935-36.	No.
1934.	1935.	1936.	1930.	1932.	1933.	1934.	1935.	1936.		
\$'000	\$'000	\$'000							p.c.	
9,684	9,901	11,351	100.0	67.4	64.7	70.3	71.9	82.4	+14.6	1
76,818	81,257	87,099	100.0	75.1	69.2	77.2	81.6	87.5	+ 7.2	2
58,333	61,681	66,965	100.0	67.6	62.1	69.1	73.1	79.4	+ 8.6	3
449,327	464,109	498,143	100.0	71.5	64.9	69.0	71.3	76.5	+ 7.3	4
824,034	858,162	913,223	100.0	71.8	67.4	74.9	78.0	83.0	+ 6.4	5
131,390	138,947	148,541	100.0	69.6	64.5	69.4	73.4	78.5	+ 6.9	6
112,314	119,586	130,621	100.0	59.2	54.5	59.4	63.2	69.0	+ 9.2	7
121,839	129,435	136,522	100.0	65.6	61.8	69.0	73.3	77.3	+ 5.5	8
172,927	188,424	207,768	100.0	65.9	62.6	69.6	75.8	83.6	+10.3	9
2,088	2,197	1,969	100.0	68.3	54.9	64.9	68.3	61.2	-10.4	10
1,958,754	2,053,699	2,202,202	100.0	69.8	64.8	71.1	74.5	79.9	+ 7.2	
8,343	8,883	9,219	100.0	72.6	70.1	75.7	80.6	83.6	+ 3.8	11
33,880	35,202	36,727	100.0	67.7	60.9	62.5	65.0	67.8	+ 4.3	12
28,607	31,027	32,915	100.0	76.2	71.2	77.0	83.5	88.5	+ 6.1	13
13,076	13,360	14,348	100.0	81.9	76.1	80.3	82.0	88.1	+ 7.4	14
307,478	312,197	325,261	100.0	77.9	73.3	75.8	77.0	80.2	+ 4.2	15
55,578	58,712	60,579	100.0	64.6	60.3	66.9	70.7	73.0	+ 3.2	16
5,233	5,580	5,952	100.0	65.4	60.2	62.5	66.6	71.1	+ 6.7	17
452,195	464,961	485,001	100.0	74.9	70.2	73.5	75.5	78.8	+ 4.3	
167,216	172,456	182,734	100.0	69.3	66.1	73.1	75.4	79.9	+ 6.0	18
254,001	258,653	273,358	100.0	71.4	68.1	71.5	72.8	76.9	+ 5.7	19
23,006	23,365	24,624	100.0	72.5	66.2	72.6	73.7	77.7	+ 5.4	20
14,729	15,433	16,566	100.0	69.1	64.9	72.3	75.8	81.3	+ 7.3	21
40,041	42,409	46,281	100.0	89.6	84.3	90.6	95.9	104.7	+ 9.1	22
331,777	339,860	360,829	100.0	73.2	69.4	73.5	75.3	79.9	+ 6.2	
179,139	216,309	251,211	100.0	53.8	51.2	70.6	85.3	99.1	+16.1	23
7,068	6,975	8,062	100.0	70.6	65.7	64.5	63.7	73.6	+15.6	24
65,321	66,869	67,141	100.0	93.0	87.9	98.3	100.6	101.0	+ 0.4	25
31,640	31,784	33,700	100.0	71.9	63.6	66.5	66.8	70.9	+ 6.0	26
2,141	2,382	2,545	100.0	59.6	56.1	63.2	70.3	75.2	+ 6.8	27
285,309	324,319	362,659	100.0	63.4	59.6	74.7	84.9	94.9	+11.8	

32.—Total Sales and Indexes of Sales of Retail Merchandise

No.	Group and Kind of Business.	Total Sales.		
		1930.	1932.	1933.
		\$'000	\$'000	\$'000
Apparel Group.				
28	Men's and boys' clothing and furnishings (includes custom tailors).....	72,111	46,786	44,435
29	Family clothing stores.....	42,144	31,818	31,582
30	Women's apparel and accessories stores.....	69,806	49,416	44,699
31	Shoe stores.....	35,908	27,445	25,989
	Totals, Apparel Group.....	219,969	155,465	146,705
Building Materials Group.				
32	Hardware stores.....	70,891	47,335	42,732
33	Lumber and building materials.....	66,201	34,811	29,331
34	Other building materials (including roofing materials).....	9,597	4,876	3,417
35	Electrical shops (without radio).....	15,548	9,220	7,765
	Heating and plumbing shops.....			
	Paint and glass stores.....			
	Totals, Building Materials Group.....	162,237	96,242	83,245
Furniture and Household Group.				
36	Furniture stores.....	41,017	25,930	23,073
37	Household appliance stores.....	17,798	10,883	9,208
38	Other home furnishings (including floor coverings, curtains, etc.).....	8,957	5,161	5,006
39	Radio and music stores.....	33,894	16,913	13,440
	Totals, Furniture and Household Group.....	101,666	58,887	50,727
40	Restaurants, Cafeterias, and Eating Places.....	75,977	47,673	41,667
Other Retail Stores.				
41	Farmers' supplies.....	45,760	30,423	29,160
42	Book stores.....	8,837	6,070	5,405
43	Coal and wood yards.....	86,047	70,675	70,384
44	Drug stores.....	76,849	63,989	57,253
45	Florists.....	9,265	6,405	5,570
46	Jewellery stores.....	26,663	16,396	15,044
47	Office, school, and store supplies and equipment dealers.....	19,330	11,463	10,003
48	Tobacco stores and stands.....	30,703	23,879	21,536
49	Government liquor stores.....	100,694	67,106	54,869
50	Unclassified kinds of business.....	113,291	74,930	69,930
	Totals, Other Retail Stores.....	517,939	371,336	339,204

Chain Stores.—During the past decade the chain store has come to occupy an important place in the field of distribution. The Dominion Bureau of Statistics classifies as chains all retail organizations operating four or more branches, excepting departmental concerns. The number of chains reported in any year thus depends not only on the rise or disappearance of firms but also on the number of units operated. As a minimum of four stores is required before a firm is classified as a chain, the

Trade, by Provinces and Kinds of Business, 1930, 1932-36—concluded.

Total Sales.			Indexes of Retail Sales. (1930=100.)						Per Cent Change, 1935-36.	No.
1934.	1935.	1936.	1930.	1932.	1933.	1934.	1935.	1936.		
\$'000	\$'000	\$'000							p.c.	
49,901	53,166	56,897	100.0	64.9	61.6	69.2	73.7	78.9	+ 7.0	28
35,575	37,702	40,208	100.0	75.5	74.9	84.4	89.5	95.4	+ 6.6	29
47,474	47,565	49,676	100.0	70.8	64.0	68.0	68.1	71.2	+ 4.4	30
27,002	27,431	28,592	100.0	76.4	72.4	75.2	76.4	79.6	+ 4.2	31
159,952	165,864	175,373	100.0	70.7	66.7	72.7	75.4	79.7	+ 5.7	
47,917	50,043	53,972	100.0	66.8	60.3	67.6	70.6	76.1	+ 7.9	32
34,302	36,904	42,306	100.0	52.6	44.3	51.8	55.7	63.9	+14.6	33
4,054	4,495	5,518	100.0	50.8	35.6	42.2	46.8	57.5	+22.8	34
8,657	9,125	10,207	100.0	59.3	49.9	55.7	58.7	65.6	+11.9	35
94,930	100,567	112,003	100.0	59.3	51.3	58.5	62.0	69.0	+11.4	
26,765	29,229	32,231	100.0	63.2	56.3	65.3	71.3	78.6	+10.3	36
10,742	12,454	13,424	100.0	61.1	51.7	60.4	70.0	75.4	+ 7.8	37
5,797	5,872	6,779	100.0	57.6	55.9	64.7	65.6	75.7	+15.4	38
15,524	17,516	19,589	100.0	49.9	39.7	45.8	51.7	57.8	+11.8	39
58,823	65,071	72,023	100.0	57.9	49.9	57.9	64.0	70.8	+10.7	
44,087	45,825	48,762	100.0	62.7	54.8	58.0	60.3	64.2	+ 6.4	40
34,239	35,309	38,282	100.0	66.5	63.7	74.8	77.2	83.7	+ 8.4	41
5,622	5,898	6,283	100.0	68.7	61.2	63.6	66.7	71.1	+ 6.5	42
71,690	72,486	75,959	100.0	82.1	81.8	83.3	84.2	88.3	+ 4.8	43
59,458	61,353	64,055	100.0	83.3	74.5	77.4	79.8	83.4	+ 4.4	44
5,905	6,097	6,448	100.0	69.1	60.1	63.7	65.8	69.6	+ 5.8	45
16,819	18,238	19,866	100.0	61.5	56.4	63.1	68.4	74.5	+ 8.9	46
12,269	13,746	15,656	100.0	57.8	50.4	61.9	69.3	79.0	+13.9	47
22,551	23,129	24,501	100.0	77.8	70.3	73.4	75.3	79.8	+ 5.9	48
56,207	56,830	65,908	100.0	66.6	54.5	55.8	56.4	65.5	+16.0	49
79,700	81,690	85,860	100.0	66.1	61.7	70.3	72.1	75.8	+ 5.1	50
364,460	374,776	402,818	100.0	71.7	65.5	70.4	72.4	77.8	+ 7.5	

reduction in branches below this number automatically removes a firm from the chain store group. In an effort to obtain some comparative information for chain stores, a careful check was made of census and other records for the year 1923. The data secured do not provide complete figures for chain stores in the early year, but the figures in Table 33 give some indication of the growth in chain stores between 1923 and 1930 for the trades in which chains hold important positions.

33.—Numbers of Chains and Chain Stores in Selected Kinds of Business, 1923, 1930, 1935, and 1936.

Kind of Business.	1923. ¹		1930.		1935.		1936.	
	Chains.	Chain Stores.	Chains.	Chain Stores.	Chains.	Chain Stores.	Chains.	Chain Stores.
Candy and confectionery.....	6	65	14	163	9	167	10	177
Grocery and combination.....	32	640	66	2,004	73	2,090	75	2,079
Meat markets.....	13	154	21	214	13	151	14	150
Dry goods.....	4	18	10	94	6	62	5	58
Variety, 5-and-10, and to-a-dollar..	3	122	15	313	14	377	14	396
Automobile dealers.....	4	36	10	76	4	36	4	35
Filling stations.....	5	177	28	646	27	611	28	503
Men's and boys' clothing and furnishings (including tailors).....	8	68	22	176	14	150	16	154
Family clothing.....	1	4	13	55	12	67	14	73
Women's apparel and accessories (including millinery).....	5	37	28	183	18	158	21	172
Shoes.....	5	35	17	193	24	303	25	320
Hardware.....	8	37	13	70	12	64	13	67
Furniture.....	2	51	8	90	8	65	6	63
Radio and music.....	5	51	7	73	5	28	5	29
Drugs.....	22	193	31	284	29	307	30	314
Jewellery.....	1	6	3	23	2	26	3	32
Office equipment.....	10	75	16	171	12	140	12	141
Tobacco.....	9	159	9	210	11	230	9	215
Sub-Totals.....	143	1,928	331	5,038	293	5,032	304	4,978
Lumber and building materials....	49	1,012	46	1,018	38	814	37	807
Totals.....	192	2,940	377	6,056	331	5,846	341	5,785

¹ Incomplete figures, see text on pp. 624 and 625.

The sales of chain stores formed 17·7 p.c. of the total retail merchandise trade in 1930 and 17·9 p.c. in 1936. Grocery and combination store chains had 29·5 p.c. of the total sales for these businesses in 1930 and 33·0 p.c. in 1936. The proportion of chain sales to total sales in some other important lines of trade for the year 1936 were: shoe stores, 32·6 p.c.; drug stores, 20·1 p.c.; and furniture stores 12·8 p.c. Summary figures for all chain stores in Canada are given in Table 34.

34.—Principal Statistics for Chain Stores, 1930-36.

Year.	Chains.	Chain Stores (average number).	Value of Sales.	Year.	Chains.	Chain Stores (average number).	Value of Sales.
	No.		\$		No.		\$
1930.....	518	8,097	487,336,000	1934.....	445	7,804	347,186,100 ¹
1931.....	506	8,188	434,199,700	1935.....	445	7,666	364,129,800
1932.....	486	8,066	360,806,200	1936.....	457	7,588	394,935,000
1933.....	461	7,900	328,902,600				

¹ Revised since the publication of the 1937 Year Book.

Retail Sales of New Motor Vehicles in Canada.—Statistics on new motor vehicle sales in Canada are collected monthly from Canadian manufacturers and assemblers, and from manufacturers in the United States of vehicles made for sale in this country. Number of units sold and retail value of sales are both reported. The retail value is the price paid by an individual purchaser at the Canadian point of manufacture and includes sales and excise taxes, charges for standard accessories, dealers' commissions, etc. Freight charges from factory to place of purchase are excluded. Duty is included in the retail value of sales of imported cars.

Sales in 1937 were up 27·1 p.c. in number and 26·3 p.c. in value over the preceding year. More than three times as many new vehicles were sold in 1937 as in 1933 when the lowest point was reached. Passenger model sales registered increases of 23·7 p.c. in number and 22·3 p.c. in value over 1936, while the improvement for commercial vehicles was even greater, resulting in increases of 42·0 p.c. in number and 43·2 p.c. in value over the preceding year.

35.—Retail Sales of New Motor Vehicles in Canada, calendar years, 1932-37, with Total Value for 1930.

NOTE.—The first year for which details are available is 1932. The total for 1930 was secured in connection with the Census of Merchandising and Service Establishments.

Year.	Passenger Cars.		Trucks and Buses.		Totals.	
	Number.	Value.	Number.	Value.	Number.	Value.
		\$		\$		\$
1930.....	1	—	1	—	1	122,165,000
1932.....	38,621	38,919,015	7,249	6,341,727	45,870	45,260,742
1933.....	39,568	39,692,630	5,764	5,757,600	45,332	45,450,230
1934.....	61,503	63,566,402	11,855	12,219,059	73,358	75,785,461
1935.....	83,242	83,429,114	13,219	18,313,335	101,461	101,742,449
1936 ¹	92,287	95,403,199	21,027	22,179,597	113,314	117,582,796
1937 ²	114,153	116,714,488	29,867	31,771,731	144,020	148,486,219

¹ Not available.
revision.

² Revised since the publication of the 1937 Year Book.

³ Subject to

Financing of Motor Vehicle Sales in Canada.—Financing corporations play an important part in the retail distribution of both new and used motor vehicles in Canada. They extend credit facilities to customers who could not enter the market if required to pay with cash and to others who, though in a position to pay cash, find it more convenient to budget their expenditures on the instalment basis. They also provide a service to the motor dealers by assuming the risks and inconveniences connected with instalment sales, thus permitting the dealers to operate on a smaller capital outlay than would otherwise be necessary.

Statistics on financing are compiled monthly from returns secured from all large finance companies in Canada which are engaged in purchasing accounts, contracts or notes arising out of retail sales of motor vehicles. Aggregates of the monthly data show that sales of 176,387 motor vehicles (including both new and used models) were financed to the extent of \$75,486,464 in 1937. These figures reveal increases of 28.3 p.c. in number and 37.6 p.c. in amount over the 137,514 vehicles which were financed for \$54,859,812 in 1936. New vehicles numbering 55,949 were financed for \$40,538,414 or an average of \$725 each. There were also 120,438 used vehicles whose sales were financed to the extent of \$34,948,050 or for \$290 each.

A comparison of sales and financing of new motor vehicles is shown in Table 36; 38.8 p.c. of all new motor vehicle sales in Canada in 1937 passed through the hands of financing corporations. The corresponding amount of financing amounted to 27.3 p.c. of the total selling value of all new models. Total sales of used vehicles not being available, a similar comparison for these types cannot be made.

36.—Comparison of Sales and Financing of New Motor Vehicles in Canada, 1932-37.

Year.	New Vehicles Sold.		New Vehicles Financed.			
	Number of Units.	Retail Value.	Units.		Financing.	
			Number.	Per cent of Total Sold.	Amount.	Per cent of Total Sales.
		\$			\$	
1932.....	45,870	45,260,742	21,293	46.4	12,741,179	28.2
1933.....	45,332	45,450,230	15,880	35.0	10,030,368	22.1
1934.....	73,358	75,785,461	23,264	31.7	16,364,735	21.6
1935.....	101,461	101,742,449	31,950	31.5	22,410,656	22.0
1936 ¹	113,314	117,582,796	42,863	37.8	29,887,861	25.4
1937 ²	144,020	148,486,219	55,949	38.8	40,538,414	27.3

¹ Revised since the publication of the 1937 Year Book.

² Subject to revision.

Monthly Indexes of Retail Sales.—In recent years the Dominion Bureau of Statistics has published monthly indexes of the dollar value of retail sales based upon reports received from department stores, from chain organizations and from a number of independent firms operating in thirteen lines of business. While these reports cover only a part of the field and relate mainly to the business of department and chain stores, they embrace a sufficiently large number of stores to provide a fairly accurate indication of the current movements in retail sales for the kinds of business which are included.

Two sets of figures are shown for the general indexes of retail trade in Table 37; in the first set no adjustments have been made, while in the second, corrections are incorporated to allow for the variations in number of business days and for seasonal influences. This general index of retail sales shows that the low point in retail trade was reached in the early part of 1933. Since that time there has been a gradual improvement in the dollar volume of sales. It has already been pointed out in connection with the annual merchandising figures that the dollar value of retail sales is greatly affected by changes in price levels. This factor should be borne in mind when considering the monthly indexes of retail sales.

A comparison of the unadjusted indexes of retail sales based upon the aggregate monthly figures of the reporting firms reveals wide seasonal swings in most lines of retail business. In general, retail sales are lowest in January and February and are highest for the year in December. A secondary peak in the spring months is followed by a recession during July and August which brings the level of trade almost to the low point of January and February. Seasonal swings are not similar in extent or timing for all lines of business. The variations are least for businesses such as drug stores, grocery and meat stores, and restaurants, whereas clothing, shoe, radio and music, hardware, and furniture stores show the greatest seasonal fluctuations. (See Table 38.)

The indexes of retail sales for the individual lines of business mentioned in Table 38 are corrected to allow both for variations in the number of business days in different months and for usual seasonal influences.

37.—Index Numbers of Retail Sales Based on Monthly Reports of Department and Chain Stores, by Months, 1929, 1930, and 1933-37.

NOTE.—The general indexes are composite figures secured by weighting the indexes of sales for the thirteen kinds of business in proportion to their relative position in the total trade.

(Average for 1930=100.)

Month.	Unadjusted Indexes.							Adjusted Indexes.						
	1929.	1930.	1933.	1934.	1935.	1936.	1937. ¹	1929.	1930.	1933.	1934.	1935.	1936.	1937. ¹
Jan.....	94.7	93.7	54.7	57.7	57.8	58.5	62.8	111.8	110.0	66.9	68.5	68.3	68.6	73.8
Feb.....	91.4	86.8	51.9	56.2	56.4	60.2	61.6	112.2	106.5	63.7	68.9	69.2	68.7	75.5
Mar.....	110.0	94.7	62.1	69.3	64.9	64.5	73.3	111.0	102.7	66.9	67.6	69.6	71.0	75.3
April.....	109.8	107.8	67.6	67.4	73.0	73.0	79.5	110.2	102.4	63.7	69.6	69.6	70.3	78.5
May.....	115.2	109.1	70.9	75.1	72.3	77.2	83.4	108.8	102.3	67.6	71.3	68.3	72.2	78.6
June.....	111.1	97.4	69.1	72.6	72.0	73.9	82.0	109.2	99.6	68.6	68.7	70.8	73.4	81.1
July.....	103.2	90.3	59.1	60.5	62.5	65.6	74.0	114.3	99.6	67.4	69.1	69.3	71.9	78.3
Aug.....	107.3	90.2	61.3	63.4	65.3	67.1	68.8	114.4	99.2	68.2	69.9	69.6	74.6	79.2
Sept.....	109.7	97.3	69.9	69.7	69.6	75.2	81.1	114.2	98.2	67.3	69.8	72.5	75.6	81.2
Oct.....	126.7	107.8	73.7	77.7	80.9	87.5	90.2	114.3	96.6	68.9	70.5	73.0	75.8	80.6
Nov.....	119.7	98.6	71.4	74.9	80.1	77.6	83.9	108.3	92.5	67.0	69.9	72.5	75.6	79.3
Dec.....	139.1	126.3	89.4	96.1	98.9	107.8	116.3	107.8	95.1	66.0	71.7	76.8	80.9	89.2
Annual Averages	111.5	100.0	66.8	70.1	71.1	74.0	79.7	111.4	100.4	66.9	69.6	70.8	73.2	79.2

¹ Subject to revision.

38.—Adjusted Index Numbers of Retail Sales Based on Monthly Reports of Department and Chain Stores, by Kinds of Business, January, 1935, to December, 1937.

NOTE.—The indexes are compiled from the returns of 36 departmental organizations and 165 chain companies operating more than 3,300 stores and a number of independents in those lines of business where chains are of minor importance. The indexes are adjusted for variations in number of stores operated, for number of business days in each month, and for seasonal variations.

(Average for 1930=100.)

Year and Month.	Boots and Shoes.	Candy.	Cltgh. Men's.	Cltgh. Women's.	De-part-ment.	Drugs.	Dyers and Clnrs.	Fur-ni-ture.	Groc. and Meats.	Hard-ware. ¹	Music and Ra-dio.	Res-taur-ants.	Vari-ety.
1935.													
Jan.....	66.5	52.5	67.6	55.3	66.7	73.6	71.6	65.7	73.9	67.6	44.2	51.7	79.5
Feb.....	60.4	65.5	67.8	61.5	69.0	73.9	68.1	71.3	73.2	68.7	44.4	50.8	83.1
Mar.....	77.9	59.2	64.2	63.9	67.1	74.1	70.0	69.2	72.9	69.6	47.8	52.0	80.6
Apr.....	73.0	62.2	65.0	59.7	72.7	73.8	70.3	71.2	73.0	72.6	45.0	50.9	87.0
May.....	69.2	61.0	60.8	55.2	68.2	73.3	73.7	65.9	70.5	67.4	48.8	50.8	76.6
June.....	80.1	61.0	63.5	56.5	75.1	70.6	82.9	69.9	68.9	71.1	43.5	50.2	83.6
July.....	69.2	51.5	67.9	60.5	68.6	72.5	77.9	70.4	71.8	71.9	40.4	48.8	83.3
Aug.....	68.9	56.6	65.6	60.6	70.8	72.2	75.4	71.5	70.2	72.0	44.0	50.6	83.3
Sept.....	75.3	59.6	68.8	61.5	73.4	74.1	73.2	71.6	73.9	72.2	40.8	51.9	85.5
Oct.....	71.2	59.8	68.9	62.6	72.7	73.6	75.1	76.2	75.4	71.2	48.0	53.3	83.9
Nov.....	69.4	58.6	70.9	63.5	75.4	75.7	77.6	74.4	70.8	71.4	46.2	54.7	85.2
Dec.....	85.8	64.3	81.6	68.4	78.7	77.5	75.1	75.8	78.4	72.8	44.0	54.3	91.7
Averages, 1935	72.2	59.3	67.7	60.8	71.5	73.7	74.2	71.1	72.7	70.7	44.8	51.7	83.6
1936.													
Jan.....	61.7	58.6	70.6	57.0	65.9	73.8	71.8	70.3	76.5	68.3	51.4	53.0	79.6
Feb.....	62.8	66.8	65.9	59.7	69.5	74.6	71.3	71.1	73.1	69.9	47.7	53.0	79.8
Mar.....	79.1	57.2	67.0	60.3	72.0	73.5	70.7	70.6	78.3	74.2	44.1	54.0	81.8
Apr.....	73.8	65.5	64.3	63.4	69.8	75.9	84.8	75.5	72.4	75.0	46.7	51.9	90.5
May.....	84.1	58.2	66.0	60.1	73.8	75.1	86.3	74.8	70.9	75.4	59.1	52.3	84.9
June.....	80.8	61.0	63.2	58.9	75.0	73.1	80.5	76.2	75.2	75.7	48.5	52.6	90.9
July.....	67.9	57.7	62.8	65.3	71.0	75.6	82.9	79.3	74.7	74.3	51.7	53.7	88.7
Aug.....	68.8	57.8	65.8	64.2	76.6	73.5 ¹	78.3	79.9	77.0	78.6	41.5	53.2	89.6
Sept.....	78.9	60.4	75.2	64.6	77.8	75.8 ¹	73.4	78.3	77.0	76.0	47.4	53.4	91.1
Oct.....	78.2	59.8	77.1 ¹	64.2 ¹	77.2	77.8 ¹	72.0	87.0	75.4	77.8	50.3	52.9	87.8
Nov.....	79.9	57.5	77.2 ¹	65.8 ¹	76.6 ¹	76.5 ¹	64.6 ¹	85.9 ¹	77.1 ¹	80.9	44.4	56.6 ¹	92.7
Dec.....	79.1 ¹	61.0 ¹	86.5 ¹	70.9 ¹	82.7 ¹	80.4 ¹	88.9	89.5 ¹	83.9 ¹	75.7	48.6 ¹	57.6 ¹	99.5
Averages, 1936	74.6	60.1¹	70.1	62.9¹	74.0	75.5¹	77.1¹	78.2¹	76.0¹	75.2	48.5	53.6	88.1
1937.													
Jan.....	64.7	55.6	78.0	61.2	72.3	79.4	69.8	88.8	79.3	82.4	57.1	55.8	89.4
Feb.....	72.1	65.2	78.6	68.8	74.3	81.1	75.1	87.4	80.6	80.2	57.9	57.3	90.3
Mar.....	71.9	65.2	71.2	65.7	72.7	79.2	69.2	88.9	84.7	86.2	56.2	57.8	96.9
Apr.....	77.8	56.9	71.3	65.6	80.3	78.5	73.1	84.0	81.0	87.0	62.1	56.2	89.8
May.....	81.0	61.5	71.0	63.3	79.2	78.3	86.3	88.4	79.2	85.2	63.8	53.4	92.2
June.....	85.7	59.5	71.2	63.6	82.3	77.8	86.9	93.2	83.9	87.5	61.7	53.6	98.2
July.....	74.8	55.9	70.0	70.5	76.1	79.0	81.8	93.2	83.4	86.0	56.9	53.4	95.9
Aug.....	71.6	52.4	71.0	68.5	80.3	80.7	77.7	87.6	83.0	86.3	44.3	54.8	93.1
Sept.....	88.2	60.3	85.1	69.2	79.6	80.9	80.0	87.6	86.4	87.2	45.8	54.9	95.4
Oct.....	85.2	60.1	84.1	69.2	79.5	83.6	70.2	89.7	84.7	82.3	49.2	55.3	92.0
Nov.....	67.4	58.5	77.3	68.4	79.9	78.6	72.3	91.5	84.5	81.6	50.0	58.3	94.1
Dec.....	96.4	61.4	97.1	77.7	88.1	86.4	87.2	88.1	101.9	78.4	50.4	55.0	108.3
Averages, 1937	78.1	59.4	77.2	67.6	78.7	80.3	78.3	89.0	84.4	84.2	54.6	55.5	94.6

¹ Revised since the publication of the 1937 Year Book.

Motion Picture Statistics.—The motion picture has become the most popular form of public entertainment and the business of satisfying the demand for such amusement has assumed a corresponding importance. In 1930 the expenditure on motion picture entertainment (exclusive of amusement taxes) was \$3.77 per capita. By 1933, due to reduced patronage and lower prices of tickets, the per capita expenditure had dropped to \$2.33, while for 1935 the figure rose slightly to \$2.50. In 1936 there was a further increase to \$2.70.

Statistics for motion picture theatres in Canada were secured for the first time in connection with the Census of Merchandising and Service Establishments, 1931. According to the results of this census, there were 910 motion picture theatres in operation in 1930. During the depression a number of theatres were closed so that in 1933 only 765 were reported. During the following three years some recovery took place, 797 theatres being reported in operation in 1934, 862 in 1935, and 959 in 1936. Summary figures of motion picture theatres by provinces for 1930, 1935, and 1936 are given in Table 39 and the principal statistics by leading cities for 1935 and 1936 in Table 40.

39.—Motion Picture Theatres, Employees, Salaries and Wages, and Total Receipts, by Provinces, 1930, 1935 and 1936.

Year and Province.	Theatres.	Employees.		Salaries and Wages.	Total Receipts.
		Male.	Female.		
	No.	No.	No.	\$	\$
1930.					
Prince Edward Island.....	5	16	21	28,200	188,300
Nova Scotia.....	56	198	69	204,400	1,814,500
New Brunswick.....	39	129	77	160,700	1,093,400
Quebec.....	148	1,126	299	1,593,600	8,301,800
Ontario.....	324	1,881	556	2,826,200	15,900,900
Manitoba.....	73	322	143	536,900	2,712,800
Saskatchewan.....	104	223	80	340,400	1,977,300
Alberta.....	85	307	72	428,700	2,323,700
British Columbia ¹	76	439	185	827,600	4,166,800
Canada.....	910	4,641	1,502	6,946,700	38,479,500
1935.²					
Prince Edward Island.....	4	13	10	10,100	90,900
Nova Scotia.....	50	202	78	176,300	1,100,200
New Brunswick.....	32	129	55	113,500	704,200
Quebec.....	141	960	292	878,800	5,840,700
Ontario.....	303	1,887	505	2,038,000	11,717,100
Manitoba.....	71	327	167	347,400	1,935,500
Saskatchewan.....	86	246	55	215,200	1,152,800
Alberta.....	81	322	65	326,700	1,630,300
British Columbia ¹	94	479	242	660,500	3,100,800
Canada.....	862	4,565	1,469	4,766,500	27,272,500
1936.³					
Prince Edward Island.....	4	14	9	11,100	103,200
Nova Scotia.....	55	241	86	196,800	1,217,600
New Brunswick.....	34	133	59	115,300	775,400
Quebec.....	154	1,012	300	842,100	6,245,200
Ontario.....	325	2,101	520	2,154,800	12,888,400
Manitoba.....	77	333	176	334,900	2,007,100
Saskatchewan.....	123	296	86	226,800	1,369,300
Alberta.....	87	332	68	347,900	1,734,100
British Columbia ¹	100	499	254	699,000	3,270,000
Canada.....	959	4,961	1,558	4,928,700	29,610,300

¹ Includes Yukon and Northwest Territories.
Book.

² Subject to revision.

³ Revised since the publication of the 1937 Year

40.—Principal Statistics for Motion Picture Theatres, by Provinces and Cities, 1935 and 1936.

NOTE.—Figures for 1936 are subject to revision.

Province and City.	Theatres.		Seating Capacity, 1936.	Receipts. ¹		Per-centage Change.	Admissions, 1936.	
	1935. ²	1936.		1935. ²	1936.		Num-ber.	Average Price. ³
	No.	No.	No.	\$	\$	p.c.	'000	cts.
Prince Edward Island.....	4	4	2,148	90,900	103,200	+13.5	378	27.3
Nova Scotia.								
Halifax.....	7	7	6,424	395,900	404,000	+ 2.0	1,958	20.6
Other places.....	43	48	23,605	704,300	813,600	+15.5	3,621	22.5
Totals, Nova Scotia.....	50	55	30,029	1,100,200	1,217,600	+10.7	5,579	21.8
New Brunswick.								
Saint John.....	7	7	6,164	299,100	312,900	+ 4.6	1,631	19.2
Other places.....	25	27	11,621	405,100	462,500	+14.2	1,975	23.4
Totals, New Brunswick..	32	34	17,785	704,200	775,400	+10.1	3,606	21.5
Quebec.								
Montreal ⁴	62	62	66,215	4,556,100	4,797,300	+ 5.3	22,007	21.8
Quebec.....	11	11	8,464	436,600	438,900	+ 0.5	2,218	19.8
Three Rivers.....	4	4	3,235	103,400	119,000	+15.1	519	22.9
Other places.....	64	77	29,901	744,600	890,000	+19.5	3,360	26.5
Totals, Quebec.....	141	154	107,815	5,840,700	6,245,200	+ 6.9	28,104	22.2
Ontario.								
Toronto.....	95	102	83,545	4,772,000	5,198,300	+ 8.9	22,301	23.3
Hamilton.....	18	18	16,690	821,800	885,000	+ 7.7	4,194	21.1
Ottawa.....	12	12	11,768	837,100	888,900	+ 6.2	3,923	22.7
London.....	6	7	7,548	443,600	467,400	+ 5.4	1,692	27.6
Windsor ⁵	6	8	8,154	365,800	409,300	+11.9	1,826	22.4
Other places.....	166	178	100,582	4,476,800	5,039,500	+12.6	20,038	25.2
Totals, Ontario.....	303	325	228,287	11,717,100	12,888,400	+10.0	53,974	23.9
Manitoba.								
Winnipeg.....	30	32	26,506	1,593,100	1,592,000	- 0.1	7,205	22.0
Other places.....	41	45	15,935	342,400	415,100	+21.2	1,886	22.0
Totals, Manitoba.....	71	77	42,441	1,935,500	2,007,100	+ 3.7	9,091	22.1
Saskatchewan.								
Regina.....	5	5	4,421	318,000	352,000	+10.7	1,331	26.4
Saskatoon.....	6	5	4,302	271,000	295,600	+ 9.1	1,304	22.7
Moose Jaw.....	3	4	2,472	115,000	133,700	+16.3	559	23.9
Other places.....	72	109	31,491	448,800	588,000	+31.1	2,217	26.5
Totals, Saskatchewan....	86	123	42,686	1,152,800	1,369,300	+18.8	5,411	25.3
Alberta.								
Calgary.....	9	10	8,597	528,300	557,900	+ 5.6	2,185	25.5
Edmonton.....	8	8	6,553	590,900	607,000	+ 2.7	2,419	25.1
Other places.....	64	69	20,756	511,100	569,200	+11.4	2,135	26.7
Totals, Alberta.....	81	87	35,906	1,630,300	1,734,100	+ 6.4	6,739	25.7
British Columbia.								
Vancouver.....	31	31	29,426	1,765,000	1,850,100	+ 4.8	8,950	20.7
Victoria.....	6	5	4,817	359,200	339,300	- 5.5	1,504	22.6
Other places ⁶	57	64	24,861	976,600	1,080,600	+20.9	4,105	28.8
Totals, British Columbia⁶	94	100	59,104	3,100,800	3,270,000	+ 5.5	14,559	22.5
Canada.....	862	959	566,201	27,272,500	29,610,300	+ 8.6	127,441	23.2

¹ Not including amusement taxes.² Revised since the publication of the 1937 Year Book.³ Total receipts divided by number of admissions. No corrections are made for juvenile attendance, matinee, and evening prices, etc.⁴ Includes Lachine, Verdun, Westmount, and Outremont.⁵ Includes Yukon and Northwest Territories.⁶ New

Section 10.—Control and Sale of Alcoholic Liquors and Beverages in Canada.*

During the years 1916 and 1917, as a war policy, legislation prohibiting the sale of alcoholic liquors, except for medicinal and scientific purposes, was passed in all the provinces except Quebec, where similar legislation was passed in 1919. The prohibition extended to the sale of beer and wine except in Quebec. Native wine, however, could be sold in Ontario.

In aid of provincial legislation prohibiting or restricting the sale of intoxicating liquors, the Dominion Government, in 1916, passed a law making it an offence to send intoxicating liquors into any province to be dealt in contrary to the law of that province. In 1919 this Act was changed to read that "on the request of the Legislative Assembly of a province a vote would be taken on the question that the importation and the bringing of intoxicating liquors into such province be forbidden". If the majority of those voting were found to be in favour of such prohibition, the Governor in Council was to declare it in force.

After the War the provinces continued under prohibition for varying periods. Plebiscites were taken from time to time to ascertain the will of the electorate as to whether the policy of prohibition, adopted as an emergency war measure, should be continued. During 1921 Quebec and British Columbia discarded the existing prohibition laws and adopted the policy of liquor sale under government control. The same course was followed by Manitoba in 1923, Alberta in 1924, Saskatchewan in 1925, Ontario and New Brunswick in 1927, and Nova Scotia in 1930. Thus Prince Edward Island is the only province still adhering to a policy of prohibition.

The provincial Liquor Control Acts have been framed to conform to conditions peculiar to the regions where they are in force and no two are exactly alike. The salient feature of all is the establishment of a provincial monopoly of the retail sale of alcoholic beverages, with the practical elimination of private profit therefrom. Partial exception is made in the retail sale of malt liquor by brewers, which certain provinces permit while reserving regulative rights and taxing such sales heavily. In all the provinces, however, spirits may be bought only at government liquor stores. The provincial monopoly extends only to the retail sale of alcoholic beverages, the manufacture being still in private hands but under the supervision of the Liquor Boards or Commissions. The original Liquor Control Acts have been modified from time to time as deemed advisable. Brief summaries of the legislation are given in the Bureau's annual report on the Control and Sale of Liquor.

Retail Sales by Liquor Control Boards.—Data on gross sales, other revenue, and net profits of the provincial Liquor Boards, are tabulated in Table 41. In connection with the figures on gross sales it is essential to note that for Quebec, Manitoba, and Alberta, the sales of beer made directly by the brewers to the licensees are not included. The proceeds from such sales do not pass through the Boards, but the purchasers must pay through the brewers to the Boards a tax equal to 5 p.c. of the purchases in the case of Quebec, and 12½ cents per gallon in Manitoba. In Alberta purchasers from the brewers paid a tax of 12½ cents per gallon prior to April 1, 1932, and 15½ cents per gallon thereafter to April 1, 1936.† For Manitoba and Alberta, it is possible to calculate from the taxes the gallonage of beer sold but the corresponding values are not available. For Quebec, the quantity and value of sales are published by the Liquor Commission, as shown in the footnote to Table 41.

*Abridged from the report "The Control and Sale of Liquor in Canada", by Miss L. J. Beehler, M.A., published by the Dominion Bureau of Statistics.

†An amendment to the Alberta Liquor Control Act passed at the 1936 session of the Legislature provides that "brewers who manufacture beer in Alberta may sell only to the Liquor Board". All sales, both to beer licensees and to permit holders, are made only through the Board. Under the new arrangement the gallonage tax is no longer levied.

Further, it should be pointed out that the values as given do not represent the sales values to the final consumers as, in most provinces, the sale of beer by the glass is permissible. Of course, all the liquor sold in any province is not consumed by the residents of that province. The tourist traffic is a very important factor in this connection.

All the revenue resulting from the Liquor Control Acts is not paid to the Liquor Boards. In certain provinces, permit fees are paid directly to the governments and do not pass through the Boards. Table 41 further indicates the total revenue accruing to the governments through the control of liquor sales.

The reports of the Boards do not in all cases show the quantities of liquors sold; in comparing values for a series of years or between provinces it should be borne in mind that price variations may be an important factor.

Apparent Consumption of Liquor in Canada.—It is not possible to obtain accurate figures on Canadian consumption of liquor. Except in Nova Scotia, Quebec, Ontario, and Alberta, the Liquor Boards do not publish figures to show sales on a gallonage basis, and even were such data on quantity sales available for all provinces they would not necessarily represent total consumption. For example, our great tourist traffic must be considered, for it is likely that the quantities consumed by tourists reach a considerable amount. Further, there is no definite information regarding the illegal traffic in liquor, though inquiry has revealed that such illicit business has reached fairly large proportions.

In Tables 42, 43 and 44 an attempt has been made to indicate separately the apparent consumption in Canada of spirits, malt liquors, and wines. Obviously, these computations are subject to error for the reasons mentioned above, and also because no consideration has been given to increases or decreases in the quantities held in stock by the Boards or by licensees. For example, owing to exceptionally favourable conditions abroad, the Liquor Boards may in certain years buy heavily to replenish stocks or create reserves; such purchases would unduly weight the apparent consumption figures for these years. The figures in these tables have been arrived at as follows:—

Spirits.—Practically the total production of spirits is placed in bonded warehouses whence it is released for various purposes. The quantities shown as “entered for consumption” are released from warehouse, duty paid, presumably for consumption for beverage purposes in Canada. However, part of these may be exported. The supply of spirits available in Canada for home consumption or for export must be the sum of the quantities shown under (a) entered for consumption; (b) imports; and (c) exports in bond, and if the total domestic exports and re-exports of imported goods are deducted from this figure the remainder indicates the apparent consumption in Canada.

Malt Liquors.—Only a small part of the output of malt liquors is placed in warehouses. The available supply is, therefore, made up of (a) production; (b) changes in warehouse stock; and (c) imports. By deducting the domestic exports and re-exports of imported goods from this total supply, it is possible to obtain a figure to show the apparent consumption in Canada.

Wines.—The apparent consumption of native wines is obtained by dividing the rates of excise tax into the total tax collections. This is believed to furnish a better measure of consumption than the method formerly used, *i.e.*, to subtract the exports from the production, since part of the product is not consumed in the year of production but is placed in storage for maturing. The apparent consumption of imported wines is arrived at by deducting from the imports into Canada, the re-exports of foreign supplies.

41.—Gross Sales and Net Profits of Liquor Control Boards, Additional Revenues Paid Directly to Governments, and Total Net Revenue from Liquor Control, 1934-36.

NOTE.—For Quebec, Manitoba and Alberta gross sales do not include beer sold direct by the brewers to the licensees.

Province.	Year.	Receipts by Liquor Control Boards or Commissions.			Additional Amounts for Permits, etc., Paid Direct to Provincial Governments.	Total Net Revenue from Liquor Control.
		Gross Sales.	Other Revenue.	Net Profits.		
		\$	\$	\$	\$	\$
Nova Scotia—year ended Sept. 30...	1934	2,918,612	8,419	369,343	25,007	394,350
	14 months ended Nov. 30.....	3,806,835	9,025	671,385	25,858 ¹	697,243
	Year ended Nov. 30.....	3,831,691	9,314	970,693	25,394 ²	996,087
New Brunswick—year ended Oct. 31	1934	2,296,139	18,232	557,573	Nil	557,573
	1935	2,375,961	17,756	600,762	Nil	600,762
	1936	2,695,859	19,823	782,742	Nil	782,742
Quebec ³ —year ended April 30.....	1934	11,370,604	1,236,139	5,339,536	Nil	5,339,536
	1935	11,688,510	1,677,330	6,209,100	Nil	6,209,100
	1936	12,698,163	1,764,770	4,868,400	Nil	4,868,400
Ontario—year ended Oct. 31.....	1934	27,752,675 ⁴	1,583,553	5,943,803	435,043	6,378,846
	Nov. 1—Mar. 31.....	8,110,589 ⁵	920,686	2,595,881	207,411	2,803,292
	Year ended Mar. 31.....	18,530,658 ⁶	2,926,803	7,862,719	327,097	8,189,816
Manitoba ⁷ —year ended April 30....	1934	3,767,362	442,710	992,068	Nil	992,068
	1935	4,208,701	472,991	1,086,028	Nil	1,086,028
	1936	4,539,694	494,108	1,293,288	Nil	1,293,288
Saskatchewan—year ended Mar. 31.	1934	4,823,511	14,442	918,927	1,242	920,169
	1935	5,203,864	16,299	1,027,573	1,386	1,028,959
	1936	5,735,355	88,662	1,278,731	1,614	1,280,345
Alberta ⁷ —year ended Mar. 31.....	1934	2,697,855	475,013	1,177,870	91,605	1,269,475
	1935	3,224,145	596,815	1,480,365	57,434	1,537,799
	1936	3,726,056	612,027	1,802,206	52,522	1,854,728
British Columbia—year ended Mar. 31.....	1934	9,262,102	123,264	2,270,396	43,949	2,314,345
	1935	10,195,935	134,860	2,448,042	39,301	2,487,343
	1936	11,169,437	140,544	3,015,904	45,925	3,061,829

¹Twelve months ended Sept. 30, 1935.

²Fourteen months ended Nov. 30, 1936.

³Separate

figures on beer are published by the Quebec Liquor Commission, as follows:—

Fiscal Year.	Beer Manufactured and Sold within the Province.		Beer Imported from Ontario.		Beer Exported from the Province.		Tax of 5 p.c. on Gross Sales Paid to Liquor Commission.
	gal.	\$	gal.	\$	gal.	\$	
1934.....	17,576,048	13,129,808	1,297,137	1,010,946	1,294,539	1,114,353	762,755
1935.....	18,288,799	13,603,405	1,154,871	963,284	3,617,068	3,315,035	894,086
1936.....	18,184,161	13,447,882	1,199,265	1,055,081	4,158,107	3,841,168	917,206

⁴Of this amount \$18,979,822 was sold from the liquor stores and \$8,772,854 from breweries and brewers' warehouses. In addition, sales of beer from breweries and brewers' warehouses from July 24 to October 31 totalled \$8,340,982, which amount should be taken into consideration in making comparisons with earlier years.

⁵In addition, sales of beer from breweries and brewers' warehouses totalled \$9,317,289, which amount should be taken into consideration in making comparisons with earlier years. Sales of domestic wine direct to customers at wineries and branch sales offices amounted to \$557,199.

⁶In addition, sales of beer from breweries and brewers' warehouses totalled \$29,396,420, which amount should be taken into consideration in making comparisons with earlier years. Sales of native wines direct to customers from licensed sales offices and, when permitted, from the winery premises amounted to \$1,407,933.

⁷In Manitoba and Alberta the value of beer sales is not given but the beer taxes paid to the Boards are tabulated below. In this connection it should be noted that the Boards also pay the beer tax on their purchases from the brewers and the beer sales of the Boards are included in the total gross sales shown above.

Fiscal Year.	Manitoba.		Alberta.	
	Tax.	Accrued Tax.	Tax.	
	\$	\$	\$	
1934.....	262,470	42,255	386,634	
1935.....	277,099	45,101	445,066	
1936.....	280,173	43,239	459,035	

42.—Apparent Consumption of Spirits in Canada, fiscal years ended Mar. 31, 1922-37.

Fiscal Year.	Entered for Consumption. ¹	Add Exports in Bond.	Add Imports.	Deduct Re-Exports of Imported Spirits. ¹	Deduct Total Domestic Exports. ¹	Apparent Consumption.
	pf. gal.	pf. gal.	pf. gal.	pf. gal.	pf. gal.	pf. gal.
1922	730,474	192,327	1,348,603	24,373	158,714	2,088,317
1923	729,678	315,213	1,193,123	67,283	330,820	1,839,911
1924	899,291	875,699	1,261,541	29,329	991,563	2,015,639
1925	910,316	803,535	1,161,169	10,978	1,008,583	1,855,459
1926	1,082,785	499,007	1,410,637	15,958	1,087,553	1,888,918
1927	1,404,111	571,792	1,587,475	107,282	1,266,692	2,189,404
1928	1,896,357	579,420	2,374,885	185,630	1,460,871	3,204,161
1929	2,016,802	1,143,276	2,604,769	183,889	1,911,634	3,669,324
1930	1,926,063	1,810,197	2,446,800	128,612	2,379,858	3,674,590
1931	1,180,536	2,558,327	1,990,574	19,694	2,630,805	3,078,938
1932	781,612	2,276,137	1,421,214	83	2,016,886	2,461,994
1933	769,527	1,991,994	732,306	45	1,996,113	1,497,660
1934	933,946	2,478,975	718,016	1,238	2,551,030	1,578,669
1935	1,063,928	2,215,332	713,346	45	2,205,249	1,787,312
1936	1,621,286	3,006,544	976,563	54	2,995,181	2,609,158
1937	1,900,714	5,280,885	1,126,440	462	5,289,344	3,018,233

¹Prior to 1933 export figures as given in the trade returns were in Imperial gallons. These were converted to proof gallons as follows: Canadian manufacture at 20 under proof; foreign origin at 25 under proof.

43.—Apparent Consumption of Malt Liquors, fiscal years ended Mar. 31, 1922-37.

Fiscal Year.	Production.	Add Quantities Entered for Consumption from Warehouses.	Add Imports.	Deduct Quantities placed in Warehouses.	Deduct Exports (Domestic).	Deduct Re-Exports of Imported Goods.	Apparent Consumption.
	gal.	gal.	gal.	gal.	gal.	gal.	gal.
1922	38,541,746	1,764	49,160	97,578	472,735	119	38,022,238
1923	36,902,066	2,702	54,241	10,800	1,509,763	1,756	35,436,690
1924	44,080,490	9,789	96,647	172,674	3,192,491	4,326	40,817,435
1925	48,389,995	209,398	91,928	363,548	3,142,048	Nil	45,185,725
1926	52,448,853	344,641	152,255	394,989	3,786,164	Nil	48,764,596
1927	51,755,840	1,291,954	153,105	1,292,087	4,252,583	12	47,656,217
1928	58,397,913	1,343,986	234,701	1,325,630	3,825,003	388	54,825,579
1929	65,887,410	1,712,615	242,100	1,812,444	4,110,698	634	61,863,349
1930	63,450,516	1,738,663	259,003	1,864,625	1,481,215	2,117	62,100,225
1931	59,073,685	1,831,625	230,995	1,832,803	270,102	4,366	59,029,034
1932	52,297,431	1,977,892	195,664	2,020,540	25,458	Nil	52,424,989
1933	40,664,625	1,491,735	106,587	1,412,309	35,667	Nil	40,814,971
1934	40,920,623	974,161	93,602	1,324,494	404,939	12	40,258,941
1935	52,078,590	11,176,838	97,572	11,242,518	69,994	302	52,040,186
1936	57,154,948	875,759	88,851	974,329	51,887	Nil	57,093,342
1937	60,308,148	912,436	97,725	1,011,964	112,902	Nil	60,193,443

44.—Apparent Consumption of Wines in Canada, fiscal years ended Mar. 31, 1922-37.

Fiscal Year.	Native. Apparent Consumption (Estimated from Excise Tax Collections).	Imported.			Apparent Consumption, Native and Imported.
		Imports.	Less Re-Exports.	Apparent Consumption.	
	gal.	gal.	gal.	gal.	gal.
1922	409,913	384,211	797	383,414	793,327
1923	528,355	359,273	2,663	356,610	884,965
1924	922,715	598,125	540	597,585	1,520,300
1925	806,846	706,717	753	705,964	1,512,810
1926	1,182,775	736,311	1,962	734,349	1,917,124
1927	1,482,686	901,857	19,321	882,536	2,365,222
1928	2,171,887	1,263,438	132,748	1,130,690	3,302,577
1929	2,770,117	1,334,792	195,227	1,139,565	3,909,682
1930	3,920,261	1,365,321	150,056	1,215,265	5,135,526
1931	3,408,973	1,089,897	18,573	1,071,324	4,480,297
1932	3,337,556	900,317	76	900,241	4,237,797
1933	2,478,387	684,082	45	684,037	3,162,424
1934	2,679,619	523,866	5,783	518,083	3,197,702
1935	3,187,504	542,019	1,970	540,049	3,727,553
1936	2,605,602	506,707	61	506,646	3,112,248
1937	2,693,456	472,884	173	472,711	3,166,167

CHAPTER XVIII.—TRANSPORTATION AND COMMUNICATIONS.

Canada is a country of continental dimensions, nearly 4,000 miles in length from east to west, with its relatively small population of 11,120,000 (estimated population as at June 1, 1937), in the main thinly distributed along the southern strip of its vast area. Different parts of the country are shut off from each other by areas of rough, rocky, forest terrain, such as the region lying between New Brunswick and Quebec, the areas north of lakes Huron and Superior, dividing the industrial region of Ontario and Quebec from the agricultural areas of the prairies and the barriers interposed by the mountains of British Columbia. To such a country with a population so distributed and producing, as do our western agriculturists, mainly for export, or, like our manufacturers, largely for consumption in distant portions of the country itself, cheap transportation is a necessity of life. Before 1850, when the water routes were the chief avenues of transportation and were closed by ice for several months each year, the business of the central portions of the country was reduced to a state of relative inactivity during the winter. The steam railway was required, therefore, for the adequate economic development of Canada, more particularly for linking up with the commercial and industrial world the vast productive areas of the Canadian West, and thus promoting their development. The construction of the Canadian Pacific railway gave to Canada, as an economic unit, length; the building of the newer transcontinental railways has given the country breadth.

Railway transportation, though essential in a country such as Canada, is nevertheless expensive for bulky and weighty commodities, and also for short distances where the cost of repeated handling amounts to more than actual transportation. For bulky freight, new enterprises have been either undertaken or are under consideration for improving water communication, such as the new and deeper Welland canal, the deepening of the St. Lawrence canals and of the channel between Montreal and Quebec, and the development of the Hudson Bay route. For freight movement over moderate distances the motor truck, operating over the growing network of improved highways, is providing an increasing proportion of the service. For inaccessible areas remote from the railways the aeroplane has established itself commercially and is a valuable addition to other transportation facilities.

In order to appraise the value of each of these agencies of transportation from this viewpoint, this chapter of the Year Book deals with the four main agencies, namely, carriers by rail, road, water, and air, in Parts II, III, IV, and V of the chapter. In each Part the arrangement is intended to show: (1) the plant, equipment, and facilities available; (2) the cost to the Canadian people; and (3) the traffic carried or services performed, in so far as statistics are available for each picture. Unfortunately this arrangement brings out some rather serious gaps in the information at present available; these are pointed out in the respective Parts.

Scarcely less important, from the social and economic viewpoints, is the development of communications in a country so vast and with population centres so scattered. The Post Office has been a great though little-recognized factor in promoting solidarity among the people of different parts of the Dominion, and this same desirable object is now being further aided by the radio, while telegraphs and telephones have done much to annihilate distance—the rural telephone, in particular, having been of great social and economic benefit in country districts. The press, again, assisted by cheap telegraph and cable rates and by low second-class mail rates

to all parts of the country, has been helpful in developing national sentiment. These means of communication are dealt with in Parts VI, VII, VIII, and IX.

Part I of this chapter includes a statement of the tendencies toward monopoly which has made it necessary to establish a measure of government control over those transportation and communication agencies which are not governmentally-owned and operated; to this is added an account of the origin and functions of the Board of Railway Commissioners.

PART I.—GOVERNMENTAL CONTROL OVER AGENCIES OF TRANSPORTATION AND COMMUNICATION.

Problems of transportation, because they are of such vital importance in the economic life of Canada, occupy a large part of the time and thought of our Parliaments and public men. With the modern development of new forms, it is becoming increasingly important to realize that the several agencies of transportation—carriers by rail, road, water, and air—are, or should be, inter-related parts of an integral whole. Each agency has its place in the efficient provision of necessary transportation in Canada. The problem, therefore, is to adjust the conditions under which each of these agencies operates so that the resulting movement of passengers and freight may be accomplished with the maximum of economic efficiency, that is, at the least possible cost commensurate with desired convenience. The recognition of this growing necessity for viewing the problems of transportation and related communications as parts of a co-ordinated whole is indicated by the organization of the Dominion Department of Transport. This Department was organized on Nov. 2, 1936, under authority of c. 34, 1936, unifying in one Department the control and supervision of railways, canals, harbours, marine and shipping, civil aviation and radio. The Meteorological Service is also under the Department of Transport.

Private enterprises engaged in the transportation and communications business in Canada, have, in the past 50 years, shown the same tendency toward consolidation and amalgamation which has been evident elsewhere throughout the civilized world. The basic reason for such consolidation and amalgamation has been the fact that the business of transportation and communications is, generally speaking, a 'natural monopoly', *i.e.*, a type of enterprise in which service can be more efficiently and economically rendered to the public where one or a few concerns control a particular type of service throughout the country. The outstanding example of these consolidations in Canada in our time is the concentration of control of the railways of the country in the hands of the Canadian Pacific Railway Company and the Canadian National Railways.

However, since such control brings with it elements of monopoly and possible overcharge which are distasteful to the public, it has been deemed advisable in Canada, as in other countries, to set up authorities controlling the rates to be charged and the other conditions on which services to the public are to be rendered by common carriers. This control eventually, so far as the railways within the jurisdiction of the Dominion Government were concerned, was placed in the hands of the Board of Railway Commissioners. From time to time the regulatory authority of the Commission was extended to a limited extent to other utilities. A brief summary of the history and functions of this body follows on pp. 638-639.

Besides the Board of Railway Commissioners, dealing with the larger public utilities coming under the jurisdiction of the Dominion Government, there exist, in several of the provinces, bodies which undertake among their duties the supervision and control of local public utilities operating under the jurisdiction of the

provinces, and the regulation of their rates for service. Among these are the Ontario Department of Municipal Affairs (formerly the Railway and Municipal Board of Ontario, established in 1906), the Quebec Commission of Public Utilities established in 1909, the Nova Scotia Board of Commissioners of Public Utilities, and the Public Utilities Commission of Manitoba. In the three westernmost provinces these same duties are performed by provincial Departments of Railways.

The Board of Railway Commissioners for Canada.*

In the early days of railway building in Canada, the provinces were more concerned with rapid development than with rate regulation. Under the Railway Clauses Consolidation Act of 1851, rates were fixed by the directors of the railway, subject to the approval of the Governor in Council. Beyond this, competition was relied upon to bring rates to a reasonable level. As time went on, however, those who believed in the efficacy of competition as a regulator were disillusioned. For example, complaints were made that the Grand Trunk gave low through transit rates, say from Chicago to New York, through Canada, and recouped itself by high non-competitive rates in Upper Canada. In 1888, the supervision of rates was assigned to the Railway Committee of the Privy Council, sitting in Ottawa.

At the turn of the century, two reports were prepared for the Department of Railways and Canals by Prof. S. J. McLean, the first setting down the experience of railway commissions in England and the United States, and the second discussing Canadian rate grievances, with a recommendation that regulation by commission be adopted in Canada. The second report found that non-competitive rates were exorbitant as compared with competitive rates and that the railways had exercised their right to vary rates without notice, to the great distress of shippers. Among the weaknesses of the Railway Committee as a rate-regulating body was its fixed station at Ottawa, which made the cost of appearing before it practically prohibitive. Besides, members of Parliament had no necessary aptitude for dealing with railway rates, and of their two functions—legislative and administrative—the legislative was to them the more important.

The Board of Railway Commissioners for Canada, as provided for by the amended Railway Act of 1903, was organized on Feb. 1, 1904. In the beginning, its membership consisted of a Chief Commissioner, a Deputy Chief and one Commissioner. In 1908 the membership was increased by the inclusion of an Assistant Chief Commissioner and two other Commissioners. According to the Act, the Board may be divided into two sections of three members but, since any two constitute a quorum, two Commissioners usually hear all but the more important cases, and, agreeing, give the decision of the Board.

The powers of the Commission, in brief, are in matters relating to the location, construction and operation of railways. The most important of these powers has to do with rate regulation. Passenger rates are divided into standard and special, freight rates into standard, special and competitive. Standard rates are maximum rates and the only ones which must be approved by the Board before they are applied. Special and competitive rates, being less than maximum rates, may be applied by railways without the Board's approval, provided that a change of rates has been advertised. But important rate adjustments usually come to the notice of the Commission, for the changed rate alters the extent of the territory in which a shipper can compete and on this account he is apt to appeal the case to the Commission. It is a knotty problem to mark the boundaries of competitive areas—

*Revised by P. F. Baillargeon, Secretary, Board of Railway Commissioners for Canada.

to decide whether Nova Scotian manufacturers should be given rates which would allow them to compete west of Montreal, or again, whether high construction and operation costs in British Columbia should enforce a rate which would prevent her goods from moving far into the prairies. By an amendment to the Railway Act, the regulation of telephone, telegraph, and express rates was given to the Commission, but with narrower powers than were given to it in dealing with railways.

The procedure of the Board is informal, as suits the nature of its work, for experience has shown that hearings in strict legal form lead the parties to the argument to take uncompromising attitudes. If possible, matters are settled by recommendations to the railway company or the shipper; thus, during 1936, 94.96 p.c. of the applications to the Board were settled without formal hearing. The Railway Committee had kept its station at Ottawa, giving only formal hearings, so that the grievances of those who could not afford to appear in person or pay counsel went unredressed. The itineraries of the Railway Commission are arranged so that evidence may be taken at the least expense to those giving it.

The Chief or Assistant Chief Commissioner, depending upon which one is presiding, gives final judgment on points of law when, in the opinion of the Commissioners, the question is one of law. On questions of fact the findings of the Board are final and are not qualified by previous judgments of any other court. Questions of law and jurisdiction are differentiated. In the first case, the Board may, if it wishes, allow an appeal to the Supreme Court; in the second, the applicant needs no permission to present his appeal.

The Railway Committee of the Privy Council, being a Committee of the Cabinet, was responsible to Parliament. When the powers of the Committee were made over to the Railway Commission the responsibility was retained, but necessarily by a different means. There is now provision for an appeal from any decision to the Governor General in Council, who may also of his own motion rescind or vary the action of the Board, but the power to rescind or vary usually consists in referring to the Board for reconsideration. From its inception until Dec. 31, 1936, the Board gave formal hearing to 10,382 cases. Its decision was appealed in 120 cases, 71 of these being to the Supreme Court of Canada and 49 to the Governor General in Council. Of the appeals, 13 of those carried to the Supreme Court were allowed and 3 of those to the Governor General in Council.

PART II.—RAILWAYS.

The treatment of rail transportation is divided into three sections dealing, respectively, with steam railways, electric railways, and express companies.

Section 1.—Steam Railways.*

The steam railway is still the most important transportation agency from the standpoint of investment and of traffic handled. Fortunately, the statistical field is more completely covered for this form of transportation than for any other, since there are fairly complete figures dealing with steam railway mileage, and equipment, finances, and traffic.

*Revised and checked by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch publishes an Annual Report on Steam Railways, as well as numerous other reports, for a full list of which the reader is referred to Chapter XXIX of this volume. Certain of the financial statistics of steam railways are compiled with the co-operation of officers of the Department of Transport.

Historical Sketch.—Construction was begun on the first Canadian railway in 1835. This was a line only 16 miles long between St. Johns and Laprairie, Quebec, intended to expedite the journey between Montreal and New York. It was opened for traffic in 1836, being operated at first with horses, for which steam locomotives were substituted a year later. About the same time, a line 6 miles long was built in Nova Scotia from Stellarton to a loading point on Pictou harbour to haul coal from the mines to vessels. On this line also the motive power was at first provided by horses, but in the spring of 1839 the "Samson", a locomotive built in England, brought over in a sailing vessel and still preserved in Halifax, was put in operation. A railway from Montreal to Lachine was opened in 1847 and another line to St. Hyacinthe in 1848. In 1850, however, there were only 66 miles of railway in Canada.

Commencement of the Railway Era—The Grand Trunk.—The railway era in Canada may be said to have begun in 1851, when charters were granted providing for the construction of a main line of railway between the two Canadas. These charters were repealed when the Grand Trunk charter was granted in 1852. The result was the completion of the Grand Trunk railway between Montreal and Toronto in 1856, its extension westward to Sarnia in 1859, and eastward to Rivière du Loup in 1860. The Atlantic and St. Lawrence railway, to Portland, Maine, was leased in 1853 and in 1859, on the completion of the Victoria bridge across the St. Lawrence at Montreal, the Grand Trunk had a through route 800 miles long from Portland to Sarnia. Within the next thirty years many important railways of Ontario, including the Great Western, were acquired and the Grand Trunk lines were extended to Chicago.

Construction of the Intercolonial.—An intercolonial railway linking Nova Scotia and New Brunswick with Upper and Lower Canada had been proposed as early as the 1830's. In 1844 the Imperial Government made a survey for a military road, and in 1851 agreed to recommend to Parliament either a guarantee of interest or an advance of the sum required to build a railroad. Differences of opinion as to the route resulted in the project being dropped, but in 1853 Nova Scotia undertook to construct, by 1862, a trunk line from Halifax to the New Brunswick frontier, with branch lines to Pictou and Victoria Beach. In both Nova Scotia and New Brunswick, however, the scheme of an intercolonial railway broke down for lack of funds, and in 1867 there were only 374 miles of railway in the Maritimes. These, under the B.N.A. Act, passed to the Dominion Government. The latter undertook the completion of the railway, and in 1876 the line was opened to Rivière du Loup. Later on, by acquisition of, lease of, or running rights over, other lines, the Intercolonial was extended to Montreal.

The First Transcontinental Railway—The C.P.R.—As early as 1849 a pamphlet published by Major Carmichael-Smyth advocated the construction of a Canadian Pacific railway along a route approximating that later taken. In 1851 a Parliamentary Committee reported against the enterprise at that time. In 1871 the terms under which British Columbia entered Confederation bound the Dominion to commence the Pacific railway within two years and complete it within ten years. The building of the railway as a public work actually commenced in 1874, but was not very rapidly pushed forward. In 1880 the Government entered into a contract with the Canadian Pacific Railway syndicate, granting to the syndicate all portions of the line completed or under construction, a cash subsidy of \$25,000,000, a land grant of 25,000,000 acres, free admission of materials for construction, and protection for 20 years against competing lines. The company on its side agreed to complete the railway to a fixed standard by May 1, 1891, and thereafter to maintain it effi-

ciently. As a matter of fact, the last spike on the main line was driven on Nov. 7, 1885. Like the Grand Trunk, the Canadian Pacific Railway began to acquire branch lines as feeders in the settled parts of the country along its route.

The Second Transcontinental—The Grand Trunk Pacific.—About the end of the century the Grand Trunk, which already had a line as far west as Chicago, submitted to the Canadian Government a proposal whereby it might participate in the settlement and development of the West. Lines were to be leased from Chicago *via* Minneapolis to Winnipeg, and thence a new line, subsidized by the Government, would be built to the Pacific coast. The Government raised objections to so much of the line lying in the United States and a second proposal was made for a connecting line with larger subsidies from North Bay to Winnipeg. The Government submitted, in 1903, a counter proposal that the line, instead of terminating at North Bay, should be continued east to Moncton, New Brunswick, the eastern section from Moncton to Winnipeg to be constructed by the Government and leased to the Grand Trunk Pacific for a 50-year period, the railway paying no rent for the first seven years and 3 p.c. on the cost of the railway for the remaining 43 years. The western half of the railway from Winnipeg to Prince Rupert was to be built by the Grand Trunk Pacific, the Government guaranteeing interest on bonds to 75 p.c. of the cost of construction, not exceeding \$13,000 per mile on the prairie section and \$30,000 per mile on the mountain section. The Grand Trunk reluctantly accepted this proposition and construction of the National Transcontinental and Grand Trunk Pacific commenced.

The Third Transcontinental—The Canadian Northern Railway.—The third transcontinental railway, the Canadian Northern, was begun in 1896 with the completion by Mackenzie and Mann of the 125-mile line of the Lake Manitoba Railway and Canal Co., chartered in 1889. The charters of the Winnipeg and Hudson Bay, the Manitoba and Southeastern, the Ontario and Rainy River, and the Port Arthur, Duluth and Western were next acquired. Assisted by the Manitoba Government, which desired to establish competition with the Canadian Pacific Railway, the Canadian Northern then secured the Manitoba lines of the Northern Pacific and in 1902 completed its line from Winnipeg to Port Arthur. During the following decade, the agricultural west was filling up very rapidly and, with the public of Canada under the influence of this boom, the Canadian Northern Railway was able to secure guarantees of bonds from the Dominion and Provincial Governments to enable it to extend its lines both westward to Vancouver and eastward to Montreal and so complete the great scheme of a transcontinental road.

Effect of the War on the Railways—The Drayton-Acworth Report.—With two new transcontinental main lines, besides branches, under construction, Canadian railway mileage was doubled between 1900 and 1915, increasing from 17,657 miles in the former year to 34,882 miles in the latter. The builders of the new lines, as well as the Canadian Government and people, had expected that immigration of capital and labour from Europe would rapidly settle the areas tributary to the new railroads and give them abundant and lucrative traffic, as had been the case with the C.P.R. Instead, the War came, and European labour and capital were conscripted for the struggle; immigration fell off and the anticipated traffic did not develop. On the other hand the interest on the bonds had to be met, and in 1915 the Government felt it necessary to give assistance to the railways. In 1916, after having again made loans to the Grand Trunk Pacific Railway and the Canadian Northern Railway Co., a Royal Commission was appointed by Order in Council of July 13, 1916, to investigate: (1) the general problem of transportation; (2) the status of each

of the three transcontinental systems; (3) the reorganization of any of the said systems, or their acquisition by the State; and (4) other matters considered by the Commission to be relevant to the general scope of the inquiry. The majority report of the Commission, signed by Sir Henry Drayton and Mr. Acworth, has formed the basis of the subsequent railway policy of Canada. Their recommendation was that the public should take control of the Canadian Northern, of the Grand Trunk Pacific and the Grand Trunk proper, and that they should be administered on purely business principles by a board of trustees, such compensation as seemed proper to be decided by arbitration and given to the shareholders of the Canadian Northern and the Grand Trunk.

The process of the acquisition of these railways and the financial results of their operation down to the end of 1936 are described in the latter part of Subsection 2, pp. 649-657.

The Royal Commission of 1931.—During 1930 and 1931 both freight and passenger traffic declined until new low records were being established each succeeding month. Freight and passenger revenues consequently decreased at alarming rates and with increased capital expenditures and fixed charges, the financial condition of Canadian railways demanded readjustment. To study the situation and, if possible, to remedy it, the Government appointed a Royal Commission which, on Sept. 13, 1932, submitted its report, summarized at pp. 648-650 of the 1933 Year Book. During the following session of the Dominion Parliament legislation known as The Canadian National-Canadian Pacific Act, (c. 33) 1933, was passed. A summary of this legislation was given at p. 655 of the 1936 Year Book.

Subsection 1.—Mileage and Equipment.

The mileage of steam railways in operation in Canada is given for 1835 to 1849 and for each year from 1850 to 1936 in Table 1, showing the first great period of construction in the 1850's, when the mileage grew from 66 to 2,065, the lull in the 1860's, the second great period of construction in the 1870's and 1880's, the lull in the 1890's, the third great period of construction between 1900 and 1917 and the subsequent falling-off in the rate of increase.

1.—Record of Steam Railway Mileage as at June 30, 1835-1919, and Dec. 31, 1919-36.

Year.	Miles in Operation.	Year.	Miles in Operation.	Year.	Miles in Operation.	Year.	Miles in Operation.	Year.	Miles in Operation.	Year.	Miles in Operation.
No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1835.....	1	1863....	2,189	1879....	6,858	1895....	15,977	1911....	25,400	1925....	40,350
1836-46....	22	1864....	2,189	1880....	7,194	1896....	16,270	1912....	26,840	1926....	40,350
1847-49....	54	1865....	2,240	1881....	7,331	1897....	16,550	1913....	29,304		
1850.....	66	1866....	2,278	1882....	8,697	1898....	16,870	1914....	30,795	1927....	40,570
1851.....	159	1867....	2,278	1883....	9,577	1899....	17,250	1915....	34,882	1928....	41,022
1852.....	205	1868....	2,270	1884....	10,273	1900....	17,657	1916....	36,985	1929....	41,380
1853.....	506	1869....	2,524	1885....	10,773	1901....	18,140	1917....	38,369	1930....	42,047
1854.....	764	1870....	2,617	1886....	11,793	1902....	18,714	1918....	38,252		
1855.....	877	1871....	2,695	1887....	12,184	1903....	18,988	1919 ² ..	38,329	1931....	42,280
1856.....	1,414	1872....	2,899	1888....	12,163	1904....	19,431			1932....	42,409
1857.....	1,444	1873....	3,832	1889....	12,628	1905....	20,487	1919 ¹ ..	38,495		
1858.....	1,863	1874....	4,331	1890....	13,151	1906....	21,423	1920....	38,805	1933....	42,336
1859.....	1,994	1875....	4,804	1891....	13,838	1907....	22,446	1921....	39,191	1934....	42,270
1860.....	2,065	1876....	5,218	1892....	14,564	1908....	22,966	1922....	39,358		
1861.....	2,146	1877....	5,782	1893....	15,005	1909....	24,104	1923....	39,654	1935....	42,916
1862.....	2,189	1878....	6,226	1894....	15,627	1910....	24,731	1924....	40,059	1936....	42,552

¹ First railway construction begun but line not open for traffic until 1836.
prior years.

² Dec. 31 for this and later years.

² June 30 for this and

In total railway mileage Canada now ranks fourth with 42,552 miles, the United States, Soviet Russia and British India being the only countries with greater total mileages, and in miles per capita only Australia has a greater average, Canada's mileage being one mile of line for each 263 persons (exclusive of 339 miles, chiefly main lines, of Canadian railways crossing over United States territory).

The operated mileage in the different provinces is given for recent years in Table 2. Construction was most active in Manitoba, Saskatchewan and Alberta during the period covered while there has been a tendency for mileages to decline slightly in the other provinces, due to the abandonment of unprofitable lines.

2.—Operated Steam Railway Mileage, by Provinces, Dec. 31, 1928-36.

Province and Type of Track.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.
Single Track—									
Prince Edward Island..	276	276	286	286	286	286	286	286	286
Nova Scotia.....	1,421	1,420	1,418	1,418	1,410	1,410	1,406	1,397	1,397
New Brunswick.....	1,935	1,934	1,934	1,934	1,934	1,934	1,930	1,929	1,871
Quebec.....	4,910	4,891	4,891	4,926	4,879	4,863	4,858	4,858	4,777
Ontario.....	10,866	10,872	10,938	10,905	10,908	10,880	10,842	10,821	10,746
Manitoba.....	4,293	4,294	4,420	4,419	4,420	4,433	4,459	4,970	4,860
Saskatchewan.....	7,551	7,761	8,166	8,268	8,438	8,438	8,368	8,556	8,624
Alberta.....	5,307	5,516	5,581	5,630	5,652	5,654	5,696	5,760	5,687
British Columbia.....	4,071	4,024	4,021	4,097	4,085	4,041	4,028	3,942	3,907
Yukon.....	58	58	58	58	58	58	58	58	58
In United States.....	334	334	334	339	339	339	339	339	339
Totals, Single Track....	41,022	41,380	42,047	42,280	42,409	42,336	42,270	42,916	42,552
Second track.....	2,637	2,658	2,688	2,688	2,682	2,531	2,525	2,507	2,500
Industrial track.....	1,662	1,607	1,623	1,606	1,578	1,534	1,495	1,453	1,401
Yard track and sidings...	10,114	10,168	10,227	10,277	10,335	10,278	10,229	10,295	10,239
Grand Totals, All Tracks	55,435	55,813	56,585	56,851	57,004	56,679	56,519	57,171	56,692

Rolling-Stock.—Statistics of the rolling-stock of the steam railways of Canada are given for the latest seven years in Table 3. The figures may be supplemented by the statement that between 1920 and 1936 the average capacity of box cars increased from 34·779 tons to 40·766 tons, of flat cars from 33·459 to 41·123 tons, and of all freight cars from 35·141 tons to 41·401 tons. The average tractive power of the locomotive in use in 1920 was 31,112 lb. and in 1936, 38,432 lb.

3.—Rolling-Stock of Steam Railways, calendar years 1930-36.

Rolling-Stock.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	No.	No.	No.	No.	No.	No.	No.
LOCOMOTIVES.							
Passenger.....	1,438	1,392	1,353	1,333	1,291	1,200	1,191
Freight.....	3,192	3,165	3,123	3,073	3,035	2,876	2,862
Switching.....	784	780	751	742	727	685	660
Electric.....	37	40	39	39	34	34	34
Totals.....	5,451	5,377	5,266	5,187	5,087	4,795	4,747
PASSENGER CARS.							
First class.....	1,980	1,975	1,933	1,924	1,907	1,745	1,754
Second class.....	372	364	355	355	350	295	276
Combination.....	492	490	469	463	461	362	372
Immigrant.....	703	644	643	634	628	566	419
Dining.....	218	264	264	261	260	257	256
Parlour.....	331	310	306	303	302	290	278
Sleeping ¹	1,224	1,235	1,198	1,175	1,163	1,138	1,085
Baggage, express and postal..	1,699	1,695	1,660	1,635	1,629	1,462	1,454
Motor cars.....	73	104	105	97	96	99	92
Other.....	254	530	526	507	490	455	457
Totals¹.....	7,346	7,611	7,459	7,354	7,286	6,669	6,443

¹ Include Pullman Co. cars in Canadian service.

3.—Rolling-Stock of Steam Railways, calendar years 1930-36—concluded.

Rolling-Stock.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	No.	No.	No.	No.	No.	No.	No.
FREIGHT CARS.							
Box.....	151,500	152,841	150,979	146,207	141,768	128,816	124,448
Flat.....	17,728	17,266	16,370	15,837	15,124	13,501	12,991
Stock.....	9,479	9,281	9,048	8,522	8,744	7,467	7,219
Coal.....	22,251	23,091	22,722	22,472	18,115	17,566	17,463
Tank.....	516	512	480	476	468	425	432
Refrigerator.....	8,151	8,464	8,341	8,160	7,904	6,682	7,331
Other.....	5,402	3,310	3,056	2,988	2,929	2,303	2,124
Totals.....	215,027	214,765	210,996	204,662	195,052	176,760	172,008

Subsection 2.—Finances of Steam Railways.

The tables in this subsection deal with the capital liability, capital invested, earnings, operating expenses, employees and their earnings, and governmental aid to steam railways. However, the presentation of the financial statistics of railways in Canada would not be complete without some detailed consideration of the finances of the Government-owned railways. This is given in the latter part of the subsection. Some further statistics of revenue are included in Table 9 of the following subsection, where they are shown in relation to traffic.

Capital Liability.—The capital liability of the steam railways of Canada is shown in Table 4 for the years 1901 to 1936. The great increase after 1922 is due to the inclusion of all Government loans to railways and investment in road and equipment of Government railways as part of the capital liability of the railways. Statistics of individual lines are given in Table 5.

4.—Capital Liability of Steam Railways, as at June 30, 1901-19, and Dec. 31, 1919-36.

NOTE.—Corresponding figures for each year from 1876 to 1900, inclusive, were given on p. 649 of the 1927-28 Year Book.

Year.	Stocks.	Funded Debt.	Total.	Year.	Stocks.	Funded Debt.	Total.
	\$	\$	\$		\$	\$	\$
1901....	424,414,314	391,696,523	816,110,837	1919 ¹ ..	1,100,301,195	914,823,515	2,015,124,710
1902....	460,401,863	404,806,847	865,208,710	1919 ² ..	1,104,409,122	931,756,484	2,036,165,606
1903....	483,770,312	424,100,762	907,871,074	1920....	1,323,705,062	846,324,166	2,170,030,128
1904....	492,752,530	449,114,035	941,866,565	1921....	1,372,545,165	792,142,471	2,164,687,636
1905....	526,353,951	465,543,967	991,897,918	1922....	1,415,623,322	743,653,809	2,159,277,131
1906....	561,655,395	504,226,234	1,065,881,629	1923 ³ ..	1,385,080,426	1,879,593,612	3,264,674,038
1907....	588,568,591	583,369,217	1,171,937,808	1924....	1,401,263,285	2,012,602,328	3,413,865,613
1908....	607,891,349	631,869,664	1,239,761,013	1925....	1,378,706,860	2,092,374,049	3,471,080,909
1909....	647,534,647	660,946,769	1,308,481,416	1926 ⁴ ..	1,361,758,426	2,144,999,621	3,506,758,047
1910....	687,557,387	722,740,300	1,410,297,687	1927 ⁴ ..	1,330,215,248	2,252,256,307	3,582,471,615
1911....	749,207,687	779,481,514	1,528,689,201	1928 ⁴ ..	1,357,017,703	2,306,554,996	3,663,572,699
1912....	770,459,351	818,478,175	1,588,937,526	1929 ⁴ ..	1,405,622,070	2,497,054,907	3,902,676,977
1913....	918,573,740	613,256,952	1,531,830,692	1930 ⁴ ..	1,431,324,003	2,595,145,308	4,026,469,311
1914....	1,026,418,123	782,402,638	1,808,820,761	1931 ⁴ ..	1,438,050,759	2,793,971,329	4,232,022,088
1915....	1,024,085,983	851,724,905	1,875,810,888	1932 ⁴ ..	1,437,489,430	2,934,182,332	4,371,671,762
1916....	1,024,264,325	868,861,449	1,893,125,774	1933 ⁴ ..	1,438,834,552	2,951,690,468	4,390,525,020
1917....	1,089,114,875	896,005,116	1,985,119,991	1934 ⁴ ..	1,437,334,152	2,966,505,594	4,403,839,746
1918....	1,093,885,495	905,994,999	1,999,880,494	1935 ⁴ ..	1,433,849,530	3,026,414,779	4,460,264,309
				1936 ⁴ ..	1,425,193,791	3,062,411,719	4,487,605,510

¹ June 30 for this and prior years.

² Dec. 31 for this and later years.

³ Includes all Government loans to railways and investment in road and equipment of Dominion and provincial railways in 1923 and later years.

⁴ Does not include Canadian railway capital owned by Canadian railways.

5.—Mileage, Capital Liability, Earnings and Operating Expenses of Individual Steam Railways for the calendar year 1936.

Railway.	Single-Track Mileage.	Capital Liability.	Gross Earnings from Operation.	Operating Expenses.
	miles.	\$	\$	\$
Algoma Central Terminals, Ltd.....	1	3,095,628	1	1
Algoma Central and Hudson Bay.....	323.75	15,430,850	1,695,802	1,486,724
Alma and Jonquière.....	10.60	629,800	116,412	75,458
Brandon, Sask. and Hudson Bay ²	2	2	18,027 ²	37,806 ²
British Yukon.....	90.32	4,978,879	201,199	132,316
Canada and Gulf Terminal.....	38.10	1,740,000	72,428	66,602
Canada Southern (Lessor).....	381.00	44,365,000	15,242,757	7,868,266
Canadian National.....	21,736.49 ³	3,127,236,116 ⁴	154,178,174	145,081,184
Canadian Pacific.....	17,222.80 ³	1,188,792,952 ⁴	138,461,550	111,025,992
Central Vermont Railway, Inc.....	25.33	1	183,399	184,981
Crow's Nest Southern ²	2	2	6,159 ²	20,096 ²
Cumberland Railway and Coal Co.....	31.29	1,352,508	148,393	112,304
Detroit River Terminal Co. ⁵	5	4,050,884	5	5
Eastern British Columbia ²	2	2	2	2
Essex Terminal.....	21.31	976,000	204,590	146,618
Greater Winnipeg Water District.....	92.00	1,843,286	139,440	111,769
Hudson Bay.....	510.07	33,448,655	354,162	501,122
International Bridge and Terminal Co.....	1.06	300,000	83,156	50,513
Maine Central.....	5.10	102,388	10,616	12,093
Maritime Coal Railway and Power Co.....	12.20	699,742	96,408	55,370
Midland Railway of Manitoba.....	75.75	4,800,000	244,779	347,838
Morrissey, Fernie and Michel.....	5.37	1,263,000	23,697	23,694
Napierville Junction.....	41.74	1,200,000	439,596	293,492
Nelson and Fort Sheppard.....	60.87	2,846,800	109,466	76,410
Nipissing Central ⁶	59.74	4,174,618	392,040	361,182
Northern Alberta.....	927.62	30,095,000	2,027,960	1,711,191
Ottawa and New York.....	58.77	2,109,000	129,922	209,019
Pacific Great Eastern.....	347.80	86,060,778	619,086	503,894
Père Marquette (including L.E.D.R.).....	319.02	8,122,026	4,773,044	2,485,424
Quebec Railway Light and Power Co.....	25.37	6,268,729	264,866	311,062
Roberval and Saguenay.....	29.04	3,330,000	394,226	134,677
St. Lawrence and Adirondack.....	60.69	2,153,599	361,010	538,533
Sydney and Louisburg.....	70.29	5,085,191	1,454,260	990,026
Témiscouata.....	113.00	3,856,336	165,083	178,479
Temiskaming and Northern Ontario ⁶	514.69	41,707,935	4,743,590	2,959,627
Thousand Islands.....	4.51	60,000	29,928	28,028
Toronto, Hamilton and Buffalo.....	111.03	10,567,000	1,652,577	1,245,552
Toronto Terminals.....	3.19	24,224,800	1	1
Van Buren Bridge Co.....	0.28	250,000	3,866	2,774
Vancouver, Victoria and Eastern.....	111.38	23,500,000	519,418	339,503
Wabash (in Canada).....	245.40	1	5,294,423	3,689,636
Winnipeg River ⁷	7	7	7	7
Totals (Including Trackage Rights Duplications).....	43,686.97	4,690,708,500⁸	334,855,579	283,399,255
Canadian National (Can. and U.S.).....	23,565.96	See above	186,610,489	171,477,690

¹ Not reported.

² Ceased operations during the year.

³ Includes 26.18 miles of joint track.

Canadian lines only for Canadian National, but Canadian and U.S. lines for Canadian Pacific.

⁴ Including capital of leased lines.

⁵ Included with Canada Southern Rly.

⁶ Constructed and

operated by Ontario Government Railway Commission.

⁷ Included in C.P.R.

⁸ Includes

\$203,102,989 Canadian railway capital owned by Canadian railways.

Capital Investment.—When comparison is made between the figures of Table 6 and those of Table 4, it is seen that the capital liability of the steam railways is considerably greater than the actual investment in physical property by the railways at the same date. This discrepancy is largely accounted for by the fact that the total of capital liabilities as shown in Table 4 includes loans and advances from the Government to cover deficits of the Canadian National Railways and unpaid accrued interest on Government loans which, up to Dec. 31, 1936, amounted to \$530,832,598 as shown in Table 16. A further factor in the discrepancy is that some of the outstanding railway stocks represent little actual investment in physical property.

6.—Capital Invested in Road and Equipment of Canadian Steam Railways, calendar years 1931-36.

Investment.	1931.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$	\$
New Lines—						
Road.....	20,761,545	3,175,095	195,729	10,901	89,713	119,295
Equipment.....	632	Nil	12,322	Nil	Nil	Nil
General.....	1,588,103	371,262	620	86	Cr. 56	756
Totals.....	22,350,280	3,546,357	208,671	10,987	89,657	120,051
Additions and Betterments—						
Road.....	18,985,855	3,592,569	3,927,865	Cr. 5,354,703	2,656,051	6,263,284
Equipment.....	19,113,108	Cr. 4,090,763	Cr. 3,930,692	Cr. 3,494,711	Cr. 6,519,191	4,376,334
General.....	1,916,857	117,254	17,921	Cr. 2,811	5,641	Cr. 78,387
Undistributed	69,754	Cr. 24,836	92,590	Cr. 163,872	53,862	1,608
Totals.....	40,085,574	Cr. 405,776	107,684	Cr. 9,016,097	Cr. 3,803,637	10,562,839
Undistributed ¹ ..	Cr. 8,597,547	977,301	Cr. 21,017,200	22,774,651	Cr. 67,902,913	Cr. 17,255,277
Total Investments as at Dec. 31.....	3,382,047,218	3,386,165,100	3,365,464,255	3,379,233,796	3,307,616,903	3,301,044,516

¹ Details of this item are given in the Annual Report on Steam Railway Statistics issued by the Transportation and Public Utilities Branch of the Bureau of Statistics.

Earnings and Expenses.—Operating expenses of Canadian railways rose during 1918, 1919 and 1920, much more than operating revenues, and the operating ratio, or ratio of expenses to revenues, increased from around 70 p.c. to above 90 p.c. and remained high thereafter. The United States Government took over the operation of the United States railways when that country entered the World War and increased the rates of pay of the railway employees. The Canadian railways were also obliged to make corresponding increases and this increase in payroll has been the chief factor in increased operating ratio. Declining revenues without corresponding reductions in expenses during the past five years have also maintained the high operating ratio. The gross earnings and operating expenses of individual railways in the latest year appear in Table 5.

7.—Earnings and Operating Expenses of Steam Railways per Mile of Line and per Train Mile, for the years ended June 30, 1915-19, and the calendar years 1919-36.

Year.	Gross Earnings.	Operating Expenses.	Ratio of Expenses to Receipts.	Per Mile of Line.			Per Revenue Train Mile.	
				Gross Earnings.	Operating Expenses.	Net Earnings.	Gross Earnings.	Operating Expenses.
	\$	\$	p.c.	\$	\$	\$	\$	\$
1915 (June 30) ..	199,843,072	147,731,099	73.92	5,616	4,152	1,464	2.144	1.585
1916 " ..	261,888,654	180,542,259	68.94	6,943	4,823	2,120	2.358	1.623
1917 " ..	310,771,479	222,890,637	71.72	8,051	5,774	2,277	2.683	1.925
1918 " ..	330,220,150	273,955,436	82.96	8,581	7,119	1,462	3.006	2.494
1919 " ..	382,976,901	341,866,509	89.27	9,947	8,879	1,068	3.683	3.292
1919 (Dec. 31) ..	408,598,361	376,789,093	92.26	10,568	9,745	823	3.817	3.520
1920 " ..	492,101,104	478,248,154	97.18	12,626	12,270	356	4.192	4.074
1921 " ..	458,008,891	422,581,205	92.25	11,636	10,735	901	4.376	4.038
1922 " ..	440,687,128	393,927,406	89.39	11,196	10,008	1,188	4.072	3.640
1923 " ..	478,338,047	413,862,818	86.52	12,098	10,434	1,664	4.180	3.616
1924 " ..	445,923,877	328,483,908	85.77	11,233	9,548	1,685	4.119	3.533
1925 " ..	455,297,288	372,149,656	81.70	11,383	9,222	2,161	4.132	3.378
1926 " ..	493,599,754	389,603,452	78.91	12,278	9,653	2,625	4.298	3.391
1927 " ..	499,064,207	407,646,280	81.68	12,350	10,047	2,303	4.221	3.448
1928 " ..	563,732,260	442,701,270	78.53	13,840	10,791	3,049	4.461	3.503
1929 " ..	534,106,045	433,077,113	81.08	13,068	10,596	2,472	4.492	3.643
1930 " ..	454,231,650	380,723,411	83.86	10,897	9,133	1,764	4.150	3.538
1931 " ..	358,549,382	321,025,588	89.53	8,502	7,612	890	3.747	3.435
1932 " ..	293,390,415	256,668,375	87.48	6,922	6,055	867	3.507	3.157
1933 " ..	270,278,276	233,133,108	86.26	6,365	5,490	875	3.528	3.153
1934 " ..	300,837,816	251,999,667	83.77	7,111	5,956	1,155	3.738	3.128
1935 " ..	310,107,155	263,942,899	85.11	7,250	6,170	1,080	3.751	3.193
1936 " ..	334,768,557	283,345,968	84.64	7,839	6,635	1,204	4.012	3.395

8.—Distribution of Operating Expenses of Steam Railways, calendar years 1933-36.

Item of Expenditure.	1933.		1934.		1935.		1936.	
	\$	p.c.	\$	p.c.	\$	p.c.	\$	p.c.
Way and structures.....	48,226,441	20.69	53,502,807	21.23	55,250,291	20.93	60,378,275	21.31
Equipment.....	47,962,504	20.57	54,004,990	21.43	57,424,660	21.76	63,755,028	22.50
Traffic expenses.....	11,814,750	5.07	11,517,145	4.57	11,807,234	4.47	12,059,438	4.26
Transportation.....	112,329,273	48.18	118,639,517	47.08	124,359,790	47.12	130,780,123	46.16
General and misc. expenses.	12,800,140	5.49	14,335,208	5.69	15,100,924	5.72	16,373,104	5.77
Totals.....	233,133,105	100.00	251,999,667	100.00	263,942,899	100.00	283,345,968	100.00

Railway Wages and Salaries.—The data in Table 9 show the numbers of employees and the amounts of salaries and wages as reported by the railways for 1926 to 1936, inclusive. The Canadian National Railways brought into their railway accounts in 1928 the commercial telegraph employees, and these have been added for 1926 and 1927 in this table to make the data comparable. Because of inability of the railways to supply strictly comparable data for previous years, the numbers of employees and wages have been omitted for such, but index numbers have been computed for 1912-36 on as nearly comparable bases as possible, using 1926 data as equal to 100. The number of employees fluctuates with the volume of traffic, but not to the same extent. Salaries and wages are affected by the number of employees, rates of pay, and by the time worked. The rapid increase in the average wage in 1918 and 1919 was due to large increases in rates of pay corresponding to the "Macadoo Award" in the United States. Also the fluctuations in 1932-35 were due to reductions and restorations in basic rates of pay.

9.—Steam Railway Employees, Totals and Averages of Salaries and Wages, and Ratio of Salaries and Wages to Operating Revenues and Expenses, 1912-36.

Year.	Employees.		Salaries and Wages.		Average of Salaries and Wages.		Ratio of Salaries and Wages to—	
	Number.	Adjusted Index Number.	Amount.	Adjusted Index Number.	Amount.	Adjusted Index Number.	Gross Earnings.	Operating Expenses. ²
			\$		\$		p.c.	p.c.
1912 (June 30)...		92.2		38.2	604	41.7	43.0	62.5
1913 " "...		105.7		46.9	648	44.8	45.1	63.6
1914 " "...		94.1		45.3	702	48.5	46.0	62.5
1915 " "...		81.6		38.6	690	47.7	47.7	64.5
1916 " "...		92.0		44.0	699	48.3	41.5	60.2
1917 " "...		86.4		52.5	887	61.3	41.7	58.2
1918 " "...		84.9		61.7	1,061	73.3	46.1	55.6
1919 " "...		93.9		84.6	1,316	90.8	54.6	61.1
1919 (Dec. 31)...	1	102.7	1	94.5	1,343	92.7	57.1	61.9
1920 " "...		109.5		117.7	1,569	108.4	59.0	60.7
1921 " "...		99.1		100.3	1,478	102.1	54.1	58.6
1922 " "...		98.0		94.5	1,408	97.2	52.9	59.2
1923 " "...		103.0		100.9	1,430	98.8	52.8	61.1
1924 " "...		98.1		95.2	1,416	97.8	53.5	62.5
1925 " "...		95.8		94.3	1,438	99.3	52.0	63.6
1926 " "...	179,800	100.0	260,350,390	100.0	1,448	100.0	45.7	58.0
1927 " "...	182,143	101.3	273,932,396	105.2	1,504	103.9	48.1	58.9
1928 " "...	187,710	104.4	287,775,316	110.5	1,533	105.9	47.0	59.8
1929 " "...	187,846	104.5	290,732,500	111.7	1,548	106.9	48.9	60.2
1930 " "...	174,485	97.0	268,347,374	103.1	1,538	106.2	55.4	66.1
1931 " "...	154,569	86.0	229,499,505	88.2	1,485	102.6	58.5	65.4
1932 " "...	132,678	73.8	181,113,588	69.6	1,365	94.3	56.4	64.5
1933 " "...	121,923	67.8	158,326,445	60.8	1,299	89.7	53.9	62.5
1934 " "...	127,326	70.8	163,336,635	62.7	1,283	88.6	54.3	64.8
1935 " "...	127,526	70.9	172,956,218	66.4	1,356	93.6	51.2	60.1
1936 " "...	132,781	73.9	182,638,365	70.2	1,375	95.0	49.9	59.0

¹ Owing to the inability of the railways to supply strictly comparable data for the years prior to 1926, statistics of employees and wages which were given on p. 664 of the 1936 Year Book have been omitted here; the adjusted index numbers express the relation with later years as closely as it can be approximated.

² Ratio of salaries and wages chargeable to operating expenses only for 1926 and subsequent years.

Government Aid to Railways.—In order that the private railways of Canada might be constructed in advance of settlement, as colonization roads, or through thinly settled districts where little traffic was available, it was necessary for Dominion and Provincial Governments and even the municipalities to extend some form of assistance. The form of aid was generally a bonus of a fixed amount per mile of railway constructed and, in the early days, grants of land other than for right-of-way were also made. Tables 10 and 11 show the areas of the land granted as subsidies and for right-of-way, station grounds and townsite purposes to steam railway companies by the Dominion and Provincial Governments; the former gives the data by type of grant and the latter by railway companies to which the grants were made.

As the country developed, the objections to the land-grant method became more apparent, and aid was more frequently given in the form of a cash subsidy per mile of line, a loan, or a subscription to the shares of the railway, as shown analytically in Table 12. Table 13 records the details of the most recent type of assistance given to private railways, *viz.*, by the guaranteeing of their bonds or of the interest thereupon. These guarantees enabled the railways receiving them to borrow money at rates of interest considerably lower than would otherwise have had to be paid.

10.—Areas of Land Granted to Steam Railways by the Dominion and Provincial Governments to Dec. 31, 1936, by Type of Grant.

Government Making Grant.	Bonus Grants.	Grants for Right-of-Way, Station Grounds and Townsite Purposes.	Total.
	acres.	acres.	acres.
Dominion.....	31,783,655	97,988	31,881,643
Nova Scotia.....	160,000	Nil	160,000
New Brunswick.....	1,788,392	Nil	1,788,392
Quebec.....	2,085,710	Nil	2,085,710
Ontario.....	3,241,207	229,502	3,470,709
Manitoba.....	Nil	2,510	2,510
Saskatchewan.....	Nil	4,925	4,925
Alberta.....	Nil	328	328
British Columbia.....	8,233,410	12,239	8,245,649 ¹
Totals.....	47,292,374	347,492	47,639,866

¹ Includes 4,065,076 acres repurchased from B.C. Southern and Columbia and Western Railways.

11.—Areas of Land Granted to Steam Railways by the Dominion and Provincial Governments to Dec. 31, 1936, by Railway Companies.

Item.	Granted by—		Total.
	Dominion.	Provinces.	
	acres.	acres.	acres.
Canadian National Railways.....	5,763,741	1,841,061	7,604,802
Canadian Pacific and branch lines.....	19,861,357	6,824	19,868,181
Acquired lines.....	3,320,446	8,182,588	11,503,034
Leased lines—lease based on—			
Interest on bonds or dividends on stock.....	2,927,185	2,657,879	5,585,064
Gross earnings.....	55	Nil	55
Totals, Canadian Pacific System.....	26,109,043	10,847,291	36,956,334
Other railways.....	8,859	3,069,871	3,078,730
Totals, All Railways.....	31,881,643	15,758,223	47,639,866

12.—Cash Subsidies Granted to Railways to Dec. 31, 1936, by Railways.

Railway.	Granted by—			Total.
	Dominion.	Provinces.	Municipalities.	
	\$	\$	\$	\$
Canadian National Railways.....	64,403,853 ¹	16,677,208	7,393,867	88,474,928
Canadian Pacific Railway.....	25,000,000	937,657	464,761	26,402,418
Branch lines.....	5,089,509	Nil	Nil	5,089,509
Lines turned over to C.P.—cost to Government.....	36,234,310	Nil	Nil	36,234,310
C.P. Extensions—cost to Government.....	1,500,000	Nil	Nil	1,500,000
Paid to Quebec province for North Shore..	2,394,000	Nil	Nil	2,394,000
Loan repaid by return of land grants (6,793,014 acres).....	10,189,521	Nil	Nil	10,189,521
Acquired lines.....	11,091,608	9,054,945	2,527,150	22,673,703
Leased lines—lease based on—				
Interest on bonds or dividends on stock	7,488,367	4,224,388	1,545,246	13,258,001
Fixed rental.....	20,224	24,102	Nil	44,326
Gross earnings.....	937,058	346,500	73,000	1,356,558
Totals, Canadian Pacific Railway System	99,944,597	14,587,592	4,610,167	119,142,346
Other railways.....	7,935,385	2,126,869	1,297,668	11,359,922
Totals, All Railways.....	172,283,835	33,391,669	13,301,692	218,977,196

¹ Includes \$15,142,633 loan to Grand Trunk.

13.—Railway Bonds Guaranteed by Dominion and Provincial Governments, as at Dec. 31, 1936.

Government.	Outstanding Dec. 31, 1936.
	\$
New Brunswick.....	3,644,977
Ontario.....	6,725,485
Manitoba.....	3,000,000
Saskatchewan.....	17,904,062
Alberta.....	18,394,428
British Columbia.....	45,186,001
Total Guaranteed by Provincial Governments.....	94,854,953
Dominion Government.....	721,413,072 ¹
Grand Total.....	816,268,025

¹ Does not include \$216,207,142 perpetual debenture stock and guaranteed stock of the Grand Trunk Railway, now part of the Canadian National system, on which interest and dividends are guaranteed by the Dominion Government, nor Government-guaranteed bonds held by the Government itself.

FINANCIAL STATISTICS OF GOVERNMENT-OWNED RAILWAYS.

Canadian Government Railways.—The Intercolonial Railway, built as a condition of Confederation and completed in 1876, and the Prince Edward Island Railway, opened in April, 1875, have, since their construction, been owned and operated by the Dominion Government. In 1903 the Dominion Government undertook the construction of the National Transcontinental railway line from Moncton, N.B., to Winnipeg, to be leased to the Grand Trunk Pacific Railway Co. for a period of 50 years. However, during the Great War the company was unable to take over the operation of the road when completed in 1915. The Government itself undertook its operation and was also obliged to lease the Lake Superior branch of the Grand Trunk Pacific Railway, which was isolated from the main line. A number of eastern branch lines have been acquired in recent years. The Hudson Bay Railway is a direct liability of the Dominion Government and is being operated by the Canadian National for the Government from Apr. 1, 1935, but is not included in the data for Canadian National Railways. To Mar. 31, 1937, the total cost of this railway was \$33,941,012, and of terminal work at Churchill \$14,054,400, exclusive of the expenditure of \$6,274,218 on the terminal at Nelson.*

*These figures of total cost include deficits from operations during construction.

14.—Canadian Government Investments in Railways,¹ including Loans, to Mar. 31, 1937, and for the fiscal year 1937.

NOTE.—Summarized from the Annual Report of the Department of Transport. These investments were given by individual railways on pp. 671-672 of the 1936 Year Book. Since, except for the Hudson Bay Railway and loans to the Canadian National, they have changed little in recent years, they are repeated here only in so far as the main items of interest are concerned.

Account.	Expenditure, Fiscal Year 1937.	Total Expenditure.
Canadian Government Railways.	\$	\$
ROADS ENTRUSTED TO CANADIAN NATIONAL RAILWAYS—		
Intercolonial Railway system.....	Cr. 31	132,283,622
Prince Edward Island Railway.....	Nil	16,500,277
National Transcontinental Railway.....	Nil	168,350,661
Other railways.....	Nil	71,745,412
TOTALS.....	Cr. 31	388,879,972
ROADS NOT ENTRUSTED TO CANADIAN NATIONAL RAILWAYS—		
Hudson Bay Railway.....	82,381	32,638,323
Hudson Bay Nelson terminal.....	Nil	6,240,201
Hudson Bay Churchill terminal.....	116,681	13,263,759
TOTALS.....	199,062	52,142,283
Totals, Canadian Government Railways.....	199,031	441,022,255
Other Items.		
Governor-General's cars.....	Nil	71,539
Purchase Canadian Northern stock.....	Nil	10,000,000
Loans to Canadian Northern, Grand Trunk, Grand Trunk Pacific, Canadian National, and for purchases of equipment.....	4,967,506	686,885,166
Grand Trunk Railway accounts.....	Nil	25,729,133
Canadian Pacific Railway grant and value of railways transferred.....	Nil	62,791,435
Other railways.....	Nil	1,369,007
Totals, Other Items.....	4,967,506	786,846,230
Grand Totals.....	5,166,537	1,227,868,535

¹ Not including operating losses and profits.

The Consolidation and Organization of the Canadian National System.*

—In pursuance of an Act of 1917 (7-8 Geo. V, c. 24), the Government acquired the capital stock of the Canadian Northern Railways with a mileage of 9,566.5. The insolvency of the Grand Trunk Pacific led to the appointment of the Minister of Railways as receiver on Mar. 9, 1919, and in October, 1920, the road was transferred to the Canadian National Railways. The Grand Trunk Railway was acquired under c. 13 of the Statutes of the second session of 1919, providing for arbitration of the considerations to be given to its shareholders. This arbitration finally disposed of, steps were taken to consolidate the various railways under government operation and control. In October, 1922, the Grand Trunk Board and the Canadian Northern Board gave place to a single Canadian National Board, to which the former Canadian Government Railways were turned over for management and operation. The unification of the Grand Trunk and Canadian National Railways was provided for by Order in Council of Jan. 30, 1923, which also brought into effect the Act to incorporate the Canadian National Railway Co. and respecting Canadian National Railways (c. 13, 1919).

Operating Finances of the Canadian National Railways.†—In Table 15 "Canadian Lines" include those of the Canadian Northern system, the Grand Trunk Railway of Canada, the Grand Trunk Pacific, and the Canadian Government Railways. The "United States Lines" include those lines known as the New England line, the Grand Trunk Western, the Duluth, Winnipeg and Pacific, and,

*For further details of the acquisition of the Canadian Northern, Grand Trunk Pacific, and Grand Trunk Railways by the Dominion Government, see pp. 602-603 of the 1926 Year Book.

†For detailed statistics of the operation and finances of the Canadian National Railways during 1936, see Steam Railway Statistics, 1936, and Canadian National Railways, 1923-36, published by the Dominion Bureau of Statistics, also the Annual Report of the Canadian National Railways.

from Feb. 1, 1930, the Central Vermont. The Hudson Bay Railway was returned to the Government while under construction, and appropriations, etc., for this were not included with the 1926 and later data.

Gross revenues, operating expenses and net revenues shown in Table 15 include only those from steam railway and commercial telegraph operations, but the deficits are for the entire system, including the operating results of the Niagara, St. Catharines and Toronto Railway (electric) and other railways operated separately, hotels, commercial telegraphs, coastal steamships and all other outside operations.

Up to 1928 there was a marked improvement over the results of the first year after consolidation (1923), when the deficit, including profit and loss adjustments, was \$54,634,323, but the light traffic in 1932 so reduced gross revenues that, with increased interest charges, the deficit increased to \$101,335,074. It was reduced slightly in 1933 to \$97,651,957, in 1934 to \$89,662,354, increased in 1935 to \$115,281,690, and in 1936 stood at \$92,311,038.

The figures of Table 15 are taken from the accounts of the railways.

15.—Gross Revenues, Operating Expenses, Net Revenues, Interest on Funded Debt, and Deficits of the Canadian National Railways,* calendar years 1923-36.

Year.	Railway Operating Revenues. ²	Railway Operating Expenses. ²	Net Operating Revenues. ²			Net Corporate Income before Deducting Interest.
			Canadian Lines.	United States Lines.	Total.	
	\$	\$	\$	\$	\$	\$
1923.....	256,961,590	235,838,046	12,543,443	8,580,101	21,123,544	13,501,649
1924.....	239,596,670	221,622,049	12,494,459	5,480,162	17,974,621	14,772,328
1925.....	249,411,884	216,290,434	24,702,755	8,418,695	33,121,450	30,443,852
1926.....	270,982,225	223,561,262	36,312,349	11,108,612	47,420,961	41,586,242
1927.....	274,879,118	233,305,267	30,959,378	10,614,473	41,573,851	36,325,419
1928.....	304,591,268	249,731,696	42,638,750	12,220,822	54,859,572	44,449,780
1929.....	290,496,980	248,632,275	30,998,589	10,866,116	41,864,705	32,095,275
1930.....	250,368,998	228,288,023	16,944,523	5,136,452	22,080,975	15,730,227
1931.....	200,505,162	199,312,995	2,313	1,189,854	1,192,167	Dr. 5,282,650
1932.....	161,103,594	155,208,161	5,647,334	248,099	5,895,433	Dr. 4,041,640
1933.....	148,519,742	142,812,559	4,128,998	1,578,185	5,707,183	Dr. 3,552,286
1934.....	164,902,502	151,936,079	10,527,798	2,438,625	12,966,423	6,305,050
1935.....	173,184,502	158,926,249	9,502,437	4,755,816	14,258,253	4,590,610
1936.....	186,610,489	171,477,690	9,096,990	6,035,809	15,132,799	5,987,277

Year.	Interest on Funded Debt.		Debit Balances to Profit and Loss Account. ³		Profit and Loss Debits.	Cumulative Deficits, including Profit and Loss Balances. ³	
	* On Public Debt.	On Dominion Government Loans.	Including Government Loan Interest.	Excluding Government Loan Interest.		Including Government Loan Interest.	Excluding Government Loan Interest.
	\$	\$	\$	\$	\$	\$	\$
1923.....	35,041,380	30,157,944	51,697,675	21,539,731	2,936,648	54,634,323	24,476,379
1924.....	38,361,704	31,271,043	54,860,419	23,589,376	Cr. 385,872	109,108,807	47,679,883
1925.....	40,438,235	31,450,382	41,444,765	9,994,383	206,505	150,760,140	57,880,771
1926.....	39,197,233 ⁴	32,090,454	29,701,445	Cr. 2,389,009	Cr. 6,502,004	173,959,581	45,989,758
1927.....	40,526,097	32,505,234	36,705,912	4,200,678	820,988	211,486,481	54,011,424
1928.....	41,810,880	32,507,337	29,868,437	Cr. 2,638,900	3,446,391	244,801,309	54,818,915
1929.....	45,503,980	32,690,545	46,099,250	13,408,705	511,067	291,411,626	68,738,687
1930.....	51,316,121	32,693,876	68,279,770	35,585,894	5,453,922	365,145,318	109,778,503
1931.....	55,587,145	32,643,624	93,513,419	60,869,795	5,762,261	464,420,998	176,410,559
1932.....	56,965,279	35,525,540	96,532,459	61,006,919	4,802,615	565,756,072	242,220,093
1933.....	56,465,427	36,034,141	96,051,854	60,017,713	1,600,103	633,408,029	303,837,909
1934.....	55,811,745	35,994,578	85,501,273	49,506,695	4,161,080	753,070,381	357,505,684
1935.....	53,468,792	35,949,677	84,827,859	48,878,182	30,453,831	868,352,071	436,837,697
1936.....	49,184,623	36,428,873	79,626,219	43,197,346	12,684,819	960,663,109	492,719,862

* Includes Central Vermont Railway from Feb. 1, 1930.

² Revenues and expenses 1923-27, adjusted to include commercial telegraph lines to be comparable with 1928-36.

³ The deficit shown includes appropriation for insurance fund of \$9,739,533.

⁴ Interest at 4 p.c. on \$34,927,098 G.T.P. debenture stock reduced under agreement to 2 p.c.

The Debt and Interest Charges of the Canadian National Railways.—Table 16 analyses the increase in the debt and interest charges of the system, including both Canadian and United States lines. To define clearly what is included under debt due to the Dominion Government in Table 16, the appropriations for the Canadian Government Railways have been separated from the loans and advances to the remainder of the system. The Canadian Government Railways include the Intercolonial, National Transcontinental, Prince Edward Island and several other smaller railways in the eastern provinces, together with the Quebec Bridge. The Hudson Bay Railway was included in the Canadian Government Railways until 1926, when it was transferred back to the Department of Railways and Canals for completion, and appropriations on its account were deducted. These Canadian Government Railways appropriations do not include the operating deficits of the Canadian Government Railways for 1919 and subsequent years nor the deficits of other portions of the Eastern Lines* since July 1, 1927, but include investments for construction, purchase and working capital of the Canadian Government Railways. As the book value of these properties is included on the assets side of the balance sheet, the cost of these roads to the Dominion is included in the liabilities of the system as an offset. The construction or purchase of these roads was financed by the Dominion from the Consolidated Revenue Fund, and consequently no interest on such expenditures accrued in the railway accounts.

*Canadian National lines east of Lévis and Diamond Junction, Que.

16.—Long-Term Debt¹ of Canadian National Railways (Including Appropriations for Canadian Government Railways), Showing Principal Outstanding at ends of calendar years 1922-36.

Year.	DUE TO DOMINION GOVERNMENT.			
	Appropriations for Canadian Government Railways. ²	Loans and Advances. ^{2,3}	Unpaid Accrued Interest on Government Loans.	Total.
	\$	\$	\$	\$
⁴ 1922.....	404,272,030	115,607,457	4,443,386	524,322,873
1922.....	442,062,571 ⁵	506,945,969	69,328,803	1,018,337,343
1923.....	447,643,526 ⁵	571,406,082	98,669,270	1,117,718,878
1924.....	451,712,485 ⁵	581,406,082	130,157,992	1,163,276,559
1925.....	453,935,303 ⁵	581,406,082	161,861,503	1,197,202,888
1926.....	437,412,033	601,406,082	193,951,356	1,232,769,471
1927.....	436,416,387	601,406,082 ⁶	226,142,006 ⁶	1,263,964,475
1928.....	417,279,953	601,406,082	258,024,308	1,276,710,343
1929.....	417,150,141	601,406,082	290,088,439	1,308,644,662
1930.....	403,443,935	604,406,239	322,155,902	1,330,006,076
1931.....	405,209,240	604,406,239	354,173,113	1,363,788,592
1932.....	405,170,073	653,604,794	388,930,381	1,447,705,248
1933.....	404,378,682	661,832,895	424,338,109	1,490,549,686
1934.....	404,279,909	672,550,943	459,486,187	1,536,347,039
1935.....	405,062,275	754,600,910	495,030,137	1,654,693,322
1936.....	405,062,244	721,084,025 ⁷	530,832,598	1,656,978,867
Increases or decreases, 1922-36.....	-37,000,327	214,138,056	461,503,795	638,641,524
Plus C.G.R. credits.....				42,760,459 ⁸
Less interest on Government loans (unpaid).....				461,503,795
Net Increase in New Funds.....				219,898,188

For footnotes, see end of table, p. 653.

16.—Long-Term Debt of Canadian National Railways (Including Appropriations for Canadian Government Railways), Showing Principal Outstanding at ends of calendar years 1922-36—concluded.

Year.	DUE TO PUBLIC.				Grand Total. ¹⁰
	Guaranteed by—		Unguaranteed.	Total.	
	Dominion Government. ⁹	Provincial Governments.			
	\$	\$	\$	\$	\$
1922.....	331,309,904	93,412,807	385,198,150	809,920,861	1,334,243,734
1923.....	447,872,904	93,574,380	263,055,860	804,503,144	1,822,840,487
1924.....	470,372,904	93,574,380	259,151,772	823,099,056	1,940,817,934
1925.....	558,872,904	93,574,380	261,465,799	913,913,083	2,077,189,642
1926.....	581,372,904	93,574,380	256,382,019	931,329,303	2,128,532,191
1927.....	579,872,891	93,574,380	252,032,973 ¹¹	925,480,244 ¹¹	2,158,249,715
1928.....	657,181,330	93,574,380	230,626,027	981,381,737	2,245,346,212
1929.....	681,000,655	93,574,380	203,313,998	977,889,033	2,254,599,376
1930.....	807,048,434	94,654,505 ¹²	220,856,554 ¹²	1,122,559,493	2,431,204,155
1931.....	854,431,995	74,912,466 ¹²	239,221,402 ¹²	1,168,565,863	2,498,571,939
1932.....	970,562,289	74,912,466 ¹²	230,982,452 ¹²	1,276,457,207	2,640,245,799
1933.....	965,831,382	74,912,466 ¹²	223,773,319 ¹²	1,264,517,167	2,712,222,415
1934.....	962,992,576	74,912,466 ¹²	217,397,113 ¹²	1,255,302,155	2,745,851,841
1935.....	963,906,119	74,912,466 ¹²	207,511,854 ¹²	1,246,330,439	2,782,677,478
1936.....	889,741,774	74,912,466 ¹²	190,124,761 ¹²	1,154,779,001	2,809,472,323
1936.....	937,620,214	73,777,953 ¹²	173,214,082 ¹²	1,184,612,249	2,841,591,116
Increases or decreases, 1922-36..	489,747,310	-19,796,427	-89,841,778	380,109,105	1,018,750,629
Plus C.G.R. credits.....					42,760,459 ⁸
Less interest on Government loans (unpaid).....					461,503,795
Net Grand Total Increase in New Funds.....					600,007,293

¹ See Table 17 for short-term debt.

² Deficits of Eastern Lines from July 1, 1927, and for entire system from Jan. 1, 1932, are paid by the Dominion Government and are not included in this table. See Table 17.

³ Temporary loans and inter-line loans eliminated. ⁴ Amounts outstanding at dates constituent lines were taken over by Canadian National, viz.: Canadian Northern, Sept. 30, 1917; Grand Trunk Pacific, Mar. 9, 1919; Grand Trunk, May 21, 1920; Canadian Government, Mar. 31, 1919 (actual date of transfer Nov. 20, 1918).

⁵ Includes Hudson Bay \$14,531,706, eliminated from statement in 1926. ⁶ Government loans to lines other than Canadian Government Railways now comprising Eastern Lines ceased to accrue interest after July 1, 1927. These on June 30, 1927, were: capital \$2,565,605, deficits \$8,835,176, total \$11,400,781.

⁷ Includes temporary loan for refunding purposes, \$35,865,757. ⁸ Credits for property including Hudson Bay Railway, Halifax Harbour property, etc., transferred to other Government departments or bodies.

⁹ Includes \$216,207,142 perpetual debenture stock guaranteed as to interest only, formerly Grand Trunk bonds. ¹⁰ The amount not included in the Dominion Government debt is the total due the public, since the total due the Government is already taken into account in Dominion debt figures.

¹¹ Central Vermont included in annual report; excluded here. ¹² St. John and Quebec Railway bonds \$2,727,978 guaranteed by New Brunswick transferred from unguaranteed to guaranteed, 1929-36.

In a rather different class are the loans and advances made by the Government to the Canadian National Railways or constituent companies on notes, bonds and receiver certificates with accrued simple interest ranging from 3½ to 6 p.c. In computing the public debt of Canada the Finance Department considers these railway loans and advances as "non-active assets" similar to investments in canals, public works, etc., and as such does not subtract them from the gross debt in computing the net debt. The railways, however, debit their accounts with the accrued interest on these Government advances, all of which remains unpaid.

The debt due to the public includes debenture stock maturing and perpetual and bonds and mortgages of the constituent railways, but does not include the capital stock of the Grand Trunk Railway held by the Government, nor the cost of acquiring the same. Likewise it does not include the capital stock of the Canadian Northern system. The stock of the Grand Trunk Pacific is all held by the Canadian National system and is, therefore, not included either.

Table 17 has been compiled to reconcile the investments in and loans to the Canadian National Railways (including Canadian Government Railways) as shown

in the Public Accounts for the fiscal year ended Mar. 31, 1937, with the debt to the Dominion Government shown in the Railways' balance sheet at Dec. 31, 1936, amounting to \$1,656,978,867 as shown for 1936 in the first half of Table 16.

17.—Reconciliation between Public Accounts, Mar. 31, 1937, and Canadian National Railways' Balance Sheet, Dec. 31, 1936, with respect to the Railways' Obligations to the Dominion Government.

PUBLIC ACCOUNTS AT MAR. 31, 1937.		CANADIAN NATIONAL RAILWAYS' BALANCE SHEET, DEC. 31, 1936.	
Canadian Government Railways—	\$	Temporary loans.....	35,076,695
Capital expenditure.....	388,879,972	Canadian Government Railway	
Stores and open account.....	15,748,922	appropriation account.....	405,062,244
Canadian National Railways—		Canadian National Railway loans...	686,007,330
Loans (non-active).....	\$655,527,456	Interest on loans—accrued but un-	
Less Canadian North-		unpaid.....	530,832,598
ern stock.....	10,000,000	Total.....	1,656,978,867
	645,527,456	Deduct—	
Temporary loans ¹	42,146,771	Miscellaneous C.G.R. investments	
		and working capital not taken	
		into Public Accounts.....	Cr. 573,177
		Expenditures by C.N.R. for Hud-	
		son Bay Rly. paid from loans by	
		Dominion.....	Cr. 660,370
		Repayment of temporary loans,	
		January-March, 1937.....	35,076,695
		Unpaid interest.....	530,832,598
Total.....	1,092,303,121	Total.....	1,092,303,121

¹ Excludes assistance under Supplementary Public Works Construction Act, c. 34, 1935, as follows: purchase of railway equipment, \$3,884,489; increased employment in shops for equipment repairs, \$1,183,593; total, \$5,068,082.

Table 18 analyses the funds received and expended by the Canadian National Railways. In addition to the funds available under long-term debt, as shown in Table 16, the railways have frequently had short-term loans as well as appropriations from Consolidated Fund Account for Eastern Lines and other cash deficits. The figures given in Table 18 differ from the figures given in the annual reports of the railways by reason of certain accounting adjustments.

18.—Funds Received and Expended by Canadian National Railways, calendar years 1923-36.

FUNDS RECEIVED.

Year.	Net Capital Received through Long- Term Debt. ^{1,2}	Short- Term Notes, Dominion Government. ³	Dominion Government Contributions For Cash Deficits.	Funded Debt Discount Amortized through Income and Profit and Loss Accounts.	Increase (or Decrease) in Working Capital and Other Balance Sheet Accounts. ²	Total.
	\$	\$	\$	\$	\$	\$
Cash on hand Jan. 1, 1923.....						20,790,957
1923.....	84,145,051	10,000,000	Nil	132,487	1,555,536	95,833,074
1924.....	97,893,401	-10,000,000	Nil	352,182	-18,920,866	69,324,717
1925.....	16,473,828	Nil	Nil	631,227	25,127,772	42,232,827
1926.....	14,158,168	Nil	Nil	574,099	494,219	15,226,486
1927.....	53,351,709	Nil	2,117,936	553,183	-1,369,435	54,653,393
1928.....	-4,888,504	43,500,000	4,200,357	566,639	26,398,449	69,776,941
1929.....	140,608,313	1,329,600	4,762,217	1,087,079	-26,479,555	121,307,654
1930.....	48,165,462	10,823,942	6,476,667	658,695	-10,686,487	76,811,251
1931.....	105,396,534	-20,645,291	8,712,762	894,482	6,387,116	100,745,423
1932.....	37,219,349	-35,008,251	60,058,507 ³	913,404	-405,640	62,777,369
1933.....	-989,911	Nil	58,955,388	914,811	10,012,670	68,895,958
1934.....	1,588,480	Nil	48,407,901	847,117	2,600,892	53,444,390
1935.....	-87,961,386	74,726,975	47,421,464	1,108,096	42,528,808	77,823,957
1936.....	33,247,729	-38,861,218	43,303,394	6,533,840	-3,044,065	41,179,680
Totals....	538,411,043	35,865,757	284,416,593	15,767,341	75,572,388	970,823,979

For footnotes see end of table, p. 655.

18.—Funds Received and Expended by Canadian National Railways, calendar years 1923-36—concluded.

FUNDS EXPENDED.

Year.	Investments.			System Net Loss, Excluding Interest on Government Loans. ⁴		Total.
	Railway Fixed Property, Equipment, Hotels and Separately Operated Properties.	Affiliated Companies.	Sinking Funds.	Income Deficit.	Profit and Loss Charges.	
	\$	\$	\$	\$	\$	\$
1923.....	54,964,673	1,815,640	7,007,397	21,539,731	2,936,648	88,264,089
1924.....	41,814,466	2,473,155	Cr. 3,361,636	23,589,376	Cr. 385,872	64,129,489
1925.....	18,949,524	6,271,577	1,098,426	9,994,383	206,505	36,520,415
1926.....	24,462,539	1,658,228	3,039,196	Cr. 2,389,009	Cr. 6,502,004 ³	20,268,950
1927.....	46,096,935	4,128,619	1,192,647	4,200,678	820,988	56,439,867
1928.....	44,034,153	13,026,571	3,158,122	Cr. 2,638,900	3,446,391	61,026,337
1929.....	88,499,908	Cr. 6,135,117	297,988	13,408,705	511,067	96,582,551
1930.....	66,560,355	12,066,022	2,072,350	35,585,894	5,453,922	121,738,543
1931.....	34,287,067	1,371,140	574,253	60,869,795	5,762,261	102,864,516
1932.....	799,159	950,736	142,893	61,006,919	4,802,615	67,702,322
1933.....	952,996	2,833,998	1,834,702	60,017,713	1,600,103	67,239,512
1934.....	Cr. 1,015,889	Cr. 326,107	2,174,172	49,506,695	4,161,080	54,499,951
1935.....	687,087	30,789	Cr.11,938,698	48,878,182	30,453,831	68,111,191
1936.....	6,939,581	58,830	Cr.11,417,613	43,197,347	12,684,818	51,462,463
Totals.....	428,032,554	40,223,581	Cr. 4,125,801	426,767,509	65,952,353	956,850,196
Cash on hand Dec. 31, 1936.....						13,973,783
						970,823,979

¹ This is the net increase in par value as shown in Table 17, less issue expense and discount. Interest on Government loans is not included. ² Temporary loans and inter-line loans are excluded in the first two columns of Funds Received and included in the fifth column. "Other Balance Sheet Accounts" include profit and loss balances. ³ Deficit of lines other than Eastern Lines for 1932 not paid until 1933. ⁴ Includes charges for property abandonments, obsolete equipment and writing down land values, etc., not required in cash amounting to \$72,520,298, included in the fifth column of Funds Received. ⁵ Includes credit \$8,138,492 cancellation of G.T.P. 4 p.c. debenture stock interest of which credit \$5,348,152 relates to the period prior to 1923.

Table 19 shows the assets of the Canadian National Railways at Dec. 31, 1922, and at Dec. 31, 1936, with the increase or decrease for the fourteen-year period.

19.—Assets of the Canadian National Railways System, as at Dec. 31, 1922 and 1936.

Account.	Dec. 31, 1922.	Dec. 31, 1936.	Increase (+) or Decrease (-).
	\$	\$	\$
INVESTMENTS—			
Investments in road and equipment.....	1,765,323,644	2,095,114,004	+329,790,360
Improvements on leased railway property.....	1,492,123	4,248,964	+2,756,841
Sinking funds.....	4,629,855	504,054	-4,125,801
Deposits in lieu of mortgaged property sold.....	6,171,808	5,487,731	-684,077
Miscellaneous physical property.....	34,767,914	59,814,644	+25,046,730
Investments in affiliated companies.....	24,253,323	31,642,437	+7,389,114
Other investments.....	5,789,464	741,398	-5,048,066
TOTALS, INVESTMENTS.....	1,842,428,131	2,197,553,232	+355,125,101

19.—Assets of the Canadian National Railways System, as at Dec. 31, 1922 and 1936—concluded.

Account.	Dec. 31, 1922.	Dec. 31, 1936.	Increase (+) or Decrease (—).
	\$	\$	\$
CURRENT ASSETS—			
Cash.....	14,651,422	6,643,890	—8,007,532
Special deposits.....	6,139,435	7,329,893	+1,190,458
Loans and bills receivable.....	11,600	—	—11,600
Traffic and car service balances receivable.....	2,528,622	1,625,703	—902,919
Net balances receivable from agents and conductors.....	5,386,673	4,671,504	—715,169
Miscellaneous accounts receivable.....	16,857,420	4,116,325	—12,741,095
Dominion Government — balance due on deficit contributions.....	Nil	15,814,625	+15,814,625
Materials and supplies.....	41,408,999	25,958,347	—15,450,652
Interest and dividends receivable.....	377,003	507,347	+130,344
Rents receivable.....	112,269	56,424	—55,845
Other current assets.....	106,775	641,672	+534,897
TOTALS, CURRENT ASSETS.....	87,580,218	67,365,730	—20,214,488
DEFERRED ASSETS—			
Working fund advances.....	166,847	201,016	+34,169
Insurance and other funds.....	352,488	11,777,408	+11,424,920
Other deferred assets.....	11,805,962	6,655,458	—5,150,504
TOTALS, DEFERRED ASSETS.....	12,325,297	18,633,882	+6,308,585
UNADJUSTED DEBITS—			
Rents and insurance premiums paid in advance....	322,059	223,657	—98,402
Discount on capital stock.....	634,960	189,500	—445,460
Discount on funded debt.....	1,919,635	11,882,787	+9,963,152
Other unadjusted debits.....	12,820,903	4,520,181	—8,300,722
TOTALS, UNADJUSTED DEBITS.....	15,697,557	16,816,125	+1,118,568
Grand Totals.....	1,958,031,203	2,300,368,969	+342,337,766

Capital Revision of the Canadian National Railways.—The Canadian National Railways Capital Revision Act, c. 22 of the Statutes of 1937, dealt with certain Government liabilities of the system. It created the Canadian National Railways Securities Trust as a medium for maintaining in perpetuity the Government claims against the system for loans made, amounting to \$643,860,558, and accrued unpaid interest of \$574,781,637. This total of \$1,218,642,195 included a claim of \$43,949,039 for interest on loans not included in the Canadian National accounts. No-par value capital stock of the Securities Trust was issued to the Government in exchange for these claims at an initial stated value equal to the amount of loans used for capital purposes, namely, \$270,037,438. Capital stocks held by the Government were cancelled to the extent of \$247,628,339, and claim for an old grant of the Province of Canada, amounting to \$15,142,633 was abandoned.

All stock ownership of the various railways was placed under the control of the Canadian National Railway Company, the Government in turn receiving stock of the latter company.

A great deal of confusion has been evident when the liability accounts of the National Railways and those of the Dominion were brought together, and to avoid duplication in future, the Act provided that liabilities of the National Railways to the Government (excepting temporary financing) will be shown under the descriptive heading of "Dominion Government—Proprietor's Equity"; this is because such liabilities are all included in the net debt of Canada. At Jan. 1, 1937, this account appears as follows:—

Dominion Government—Proprietor's Equity—

1,000,000 shares of no-par value capital stock of the Canadian National Railway Company issued in exchange for residual value of Canadian Northern Capital stock.....	\$ 18,000,000-00
5,000,000 shares of no-par value capital stock issued by Securities Trust to the Government in consideration of the advances—claims for unpaid interest and collateral held by the Government.....	270,037,437-88
Dominion Government capital expenditures for Canadian Government Railways.....	388,290,263-52
	<u>\$ 676,327,701-40</u>

This new account will reflect annually all capital losses due to abandonments and the like that are not included in the annual deficit of the Railway as submitted to Parliament.

Deficits will be paid from the Consolidated Fund of Canada, in conformity with the provisions of the Canadian National-Canadian Pacific Act, 1936, which provides that deficits shall not be funded. Any temporary assistance by the Government on capital account will be repaid through the proceeds of securities sold by the Canadian National Railways.

Finally, the Act provides that an appendix shall be included in the Public Accounts of Canada to show the historical record of Government assistance to Railways, and a note to this effect will appear on the balance sheet of the Canadian National Railways in connection with the "Proprietor's Equity".

Subsection 3.—Steam Railway Traffic.

In addition to an analysis of passenger and freight traffic statistics for all steam railways, a separate analysis is given of the operations and traffic of the Canadian National Railways, since, being controlled by the Dominion Government, the information is considered of special interest.

Passenger and Freight Traffic.—The maximum volume of passenger traffic, as indicated by passengers carried one mile, was reached in the calendar year 1919 and the maximum of freight traffic in 1928. In recent years both freight and passenger traffic, especially the latter, have been affected by the increase in the use of motor vehicles and this traffic decrease was much aggravated by the general decline in commercial activity after 1929, but improvements were made in 1934, 1935, and 1936.

The average haul for freight in Table 20 is the average for all railways, which eliminates the effects of consolidations of railways and of interchanging freight between Canadian railways. The average revenue per passenger increased in 1918 and 1919 with increases in rates, but the increases between 1924 and 1930 were largely due to decreases in the short haul traffic. The increases in freight train loading and train revenues have been due to the use of larger and more powerful locomotives.

20.—Summary Analysis of Statistics of Passenger and Freight Services and Receipts, for the calendar years 1920-36.

NOTE.—Corresponding figures for the years 1915-19 were given at pp. 652-653 of the 1937 Year Book and for 1910-15 at pp. 628-629 of the 1922-23 Year Book.

PASSENGERS.

Year.	Revenue Passenger Train Miles. ¹	Passenger Car Miles. ¹	Passengers Carried. ²	Passengers Carried One Mile.	Passengers Carried One Mile per Mile of Line.
	No.	No.	No.	No.	No.
1920.....	47,383,411	341,580,467	51,318,422	3,522,494,856	90,376
1921.....	45,015,951	343,970,653	46,793,251	2,960,583,955	75,219
1922.....	44,387,087	319,234,566	44,383,620	2,814,113,531	71,497
1923.....	46,039,828	336,793,915	44,834,337	3,076,341,444	77,805
1924.....	46,785,081	338,992,333	42,921,809	2,872,333,579	72,355
1925.....	46,201,823	343,170,184	41,458,084	2,910,760,047	72,771
1926.....	46,271,124	352,327,620	42,686,166	2,998,952,309	74,595
1927.....	47,551,838	365,940,546	41,840,550	3,051,784,039	75,522
1928.....	48,918,897	380,717,433	40,592,792	3,140,860,693	77,110
1929.....	49,076,458	379,458,005	39,070,893	2,897,214,817	70,883
1930.....	47,915,171	350,905,667	34,698,767	2,422,874,877	58,123
1931.....	41,984,843	301,350,517	26,396,812	1,748,210,593	41,452
1932.....	34,995,135	259,396,089	21,099,582	1,435,959,501	33,877
1933.....	31,942,329	235,680,077	19,172,193	1,393,041,245	32,804
1934.....	31,665,689	243,236,816	20,530,718	1,530,610,962	36,179
1935.....	31,997,918	248,061,414	20,031,839	1,584,524,044	37,042
1936.....	33,221,771	242,618,884	20,497,616	1,726,058,974	40,415

Year.	Average Receipts per Passenger Mile.	Average Receipts per Passenger.	Average Passenger Journey.	Average Number of Passengers per Train.	Passenger-Train Revenue per Passenger-Train Mile.
	cents.	\$	miles.	No.	\$
1920.....	2.92	2.00	68	64	2.36
1921.....	3.04	1.92	63	57	2.30
1922.....	2.82	1.79	63	55	2.10
1923.....	2.76	1.90	69	64	2.51
1924.....	2.79	1.87	67	59	2.34
1925.....	2.69	1.89	70	60	2.33
1926.....	2.71	1.90	70	61	2.41
1927.....	2.69	1.96	73	61	2.38
1928.....	2.67	2.06	77	61	2.38
1929.....	2.77	2.06	74	56	2.33
1930.....	2.76	1.92	70	48	2.02
1931.....	2.72	1.79	66	39	1.68
1932.....	2.54	1.73	68	37	1.57
1933.....	2.29	1.66	73	39	1.50
1934.....	2.24	1.67	75	43	1.61
1935.....	2.18	1.72	79	44 ³	1.61 ³
1936.....	2.08	1.75	84	49	1.68

¹ Includes express, baggage, mail, etc., cars. publication of the 1937 Year Book.

² Duplications included.

³ Revised since the

20.—Summary Analysis of Statistics of Passenger and Freight Services and Receipts, for the calendar years 1920-36—concluded.

FREIGHT.

Year.	Revenue Freight Train Miles.	Revenue Freight Train Car Miles. ¹	Freight Carried. ²	Freight Carried One Mile.	Freight Carried One Mile per Mile of Line.
	No.	No.	tons.	tons.	tons.
1920.....	62,195,802	1,966,050,793	100,050,046	31,894,411,479	818,309
1921.....	52,454,742	1,882,652,061	83,730,829	26,621,630,554	676,311
1922.....	56,548,984	2,007,851,472	87,309,036	30,367,885,883	771,542
1923.....	61,346,243	2,260,866,213	102,258,933	34,067,658,527	861,622
1924.....	56,348,679	2,038,662,618	91,599,639	30,513,819,106	768,649
1925.....	56,122,416	2,194,066,348	94,624,599	31,965,204,683	799,150
1926.....	60,176,220	2,352,653,807	105,221,906	34,153,466,033	849,525
1927.....	62,084,741	2,411,057,514	106,011,355	34,901,652,515	863,710
1928.....	68,939,042	2,762,428,092	118,652,969	41,610,660,776	1,021,572
1929.....	61,271,673	2,422,571,513	115,187,028	35,025,895,433	856,945
1930.....	52,537,500	2,077,487,173	96,194,017	29,604,545,125	710,197
1931.....	44,341,022	1,786,711,340	74,129,694	25,707,373,092	609,555
1932.....	38,763,206	1,553,486,651	60,807,482	23,136,666,295	545,843
1933.....	34,647,975	1,456,244,715	57,364,025	21,092,594,200	496,705
1934.....	38,754,761	1,628,727,881	68,036,505	23,320,451,031	551,220
1935.....	39,912,286	1,666,893,664	69,141,100	24,235,167,157	566,560
1936.....	50,219,782 ³	1,795,275,640	75,846,566	26,414,113,720	618,482

Year.	Freight Receipts per Ton per Mile.	Receipts per Ton Hauled. ⁴	Average Length of Freight Haul.	Average Train Load, Revenue Tons.	Average Load per Loaded Car Mile.	Revenue per Freight Train Mile.
	cents.	\$	miles.	tons.	tons.	\$
1920.....	1.071	3.41	319	457	23.05	4.89
1921.....	1.200	3.82	318	447	22.12	5.37
1922.....	1.039	3.61	348	481	23.03	5.00
1923.....	0.987	3.29	333	512	26.44	5.05
1924.....	1.019	3.43	337	494	25.45	5.03
1925.....	1.012	3.42	338	519	25.11	5.25
1926.....	1.043	3.39	325	519	25.07	5.41
1927.....	1.029	3.39	329	514	25.30	5.29
1928.....	0.994	3.49	351	557	26.96	5.54
1929.....	1.099	3.34	304	523	24.52	5.74
1930.....	1.090	3.36	308	509	24.34	5.55
1931.....	1.013	3.51	347	514	24.68	5.20
1932.....	0.937	3.56	380	517	23.57	4.84
1933.....	0.955	3.51	368	521	24.92	4.98
1934.....	0.975	3.34	343	522	24.69	5.09
1935.....	0.972	3.41	351	528	24.60	5.13
1936.....	0.969	3.38	348	526	24.73	5.10

¹ Includes caboose miles.² Duplication eliminated, see Table 22 for details of freight carried.³ Revised classification includes mileage previously classed as "mixed".⁴ Revised since publication of the 1937 Year Book, to exclude duplications.

Operation of the Canadian National Railways.—The Canadian National system's steam mileage at Dec. 31, 1936, including lines in the United States, but exclusive of the Northern Alberta Railways and Toronto Terminals Railway (which are controlled jointly by the Canadian National and the Canadian Pacific Railways), was 23,566. Including the Thousand Islands Railway, 4.51, and the Muskegon Railway and Navigation Co., 5.25, controlled but separately operated, the total steam mileage was 23,576. Including 120.52 miles of electric lines, the grand total was 23,696.24.

The Maritime Freight Rates Act (17 Geo. V, c. 44), effective July 1, 1927, ordered that the accounts of the Canadian National lines east of Lévis and Diamond Junction, Quebec, be kept separate from those of the remainder of the Canadian National system. These lines were designated the "Eastern Lines" of the Canadian National Railways. The Act ordered that specified freight rates on the Eastern

Lines be reduced by 20 p.c. Other railways were allowed to make similar reductions in their freight rates in that territory and to bill on the Board of Railway Commissioners of Canada for the difference in freight receipts due to such reductions. The differences between the reduced rates and the normal rates are treated as revenues by the Canadian National Railways and paid by the Dominion Government. The totals paid to all railways under the Act were: \$1,353,464, \$2,758,893, \$3,092,677, \$3,615,218, \$2,554,673, \$1,922,073, \$1,989,130, \$2,529,394, \$2,348,399, and \$2,505,823, respectively, for the years 1927-36.

The Quebec Bridge across the St. Lawrence above Quebec city, with a main span of 1,800 ft., carrying a single-track railway and accommodation for motor and pedestrian traffic, forms a connecting link in the Canadian National Railways system and is operated as a part of it.

Table 21 shows some of the more important train traffic statistics of Canadian National Railways operation for the years 1935 and 1936.

21.—Canadian National Railways (Canadian and U.S. Lines) Train Traffic Statistics, for the calendar years 1935 and 1936.¹

Item.	1935.	1936.
Train Mileage—		
Passenger trains.....	17,752,240	18,174,203
Freight trains.....	26,499,513	28,312,940
Unit cars in passenger service.....	1,607,714	1,470,300
Unit cars in freight service.....	1,992	5,504
Totals, Train Miles².....	45,861,459	47,962,947
Passenger Train Car Mileage—		
Coaches and combination.....	47,563,104	50,083,950
Parlour, sleeping and dining cars.....	37,977,123	39,910,018
Baggage, mail, express, etc.....	48,619,941	50,515,230
Totals, Passenger Train Car Miles².....	134,160,168	140,509,198
Freight Train Car Mileage—		
Loaded freight-car miles.....	630,951,060	687,515,569
Empty freight-car miles.....	292,163,484	308,777,449
Caboose miles.....	25,105,630	27,000,778
Totals, Freight Train Car Miles².....	948,220,174	1,023,293,796
Passenger Traffic—		
Passengers carried (earning revenue).....	9,721,268	10,098,973
Passengers carried (earning revenue) one mile.....	770,037,180	831,271,084
Passenger-train miles per mile of road.....	751	791
Average passenger journey—miles.....	79.21	82.31
Average amount received per passenger.....\$	1.713	1.685
Average amount received per passenger mile.....\$	0.0216	0.0205
Average number of passengers per train mile.....	41.31	45.74
Average number of passengers per car mile.....	9.28	9.56
Total passenger-train earnings per train mile.....\$	1.56	1.58
Total passenger-train revenue per mile of road.....\$	1,278.29	1,317.22
Freight Traffic—		
Tons of revenue freight carried.....	38,807,718	43,451,052
Tons of revenue freight carried one mile.....	13,508,955,208	14,813,796,415
Tons of non-revenue freight carried one mile.....	1,697,903,733	1,761,295,539
Total tons (all classes) freight carried one mile.....	15,206,858,941	16,575,091,954
Tons of revenue freight carried one mile per mile of road.....	568,318	628,823
Total tons (all classes) freight carried one mile of road.....	640,106	704,224
Average number of tons revenue freight per train mile.....	509.78	532.20
Average number of tons (all classes) freight per train mile.....	571.32	585.86
Average number of tons (all classes) freight per loaded car mile.....	23.99	24.11
Average haul revenue freight—miles.....	348.10	340.90
Freight revenue per train mile.....\$	5.05	5.14
Freight revenue per mile of road.....\$	5,657.38	6,176.73
Freight revenue per ton.....\$	3.44796	3.34882
Freight revenue per ton mile.....\$	0.00991	0.00982

¹ Excludes electric lines.

² Work service excluded.

Commodities Hauled.—In Table 22, the duplications from two or more railways handling the same freight have been eliminated. The peak year was 1928 when agricultural products were particularly heavy. The 1936 statistics show an increase of 6,705,466 tons, or 9.7 p.c. over the 1935 total.

22.—Commodities Hauled as Freight on Steam Railways during the calendar years 1932-36.

NOTE.—In this table duplications are eliminated, i.e., the same freight handled by two or more railways is counted only once. In this respect these figures differ from those in the corresponding table in the 1926 and previous Year Books.

Group and Product.	1932.	1933.	1934.	1935.	1936.
	tons.	tons.	tons.	tons.	tons.
Agricultural Products.					
Wheat.....	11,203,710	8,900,296	8,454,195	8,367,973	8,489,009
Corn.....	387,813	456,074	435,111	296,711	486,471
Oats.....	1,032,709	889,008	1,073,495	858,724	879,304
Barley.....	423,384	385,460	635,696	455,496	911,444
Rye.....	113,607	75,900	40,901	55,001	89,506
Flaxseed.....	59,348	42,159	20,814	28,762	54,352
Other grain.....	73,300	59,368	46,022	34,746	31,717
Flour.....	1,607,160	1,554,312	1,481,241	1,368,244	1,490,529
Other mill products.....	1,487,706	1,327,833	1,460,786	1,464,264	1,694,477
Hay and straw.....	323,347	250,961	495,307	415,787	300,175
Cotton.....	92,271	109,925	124,504	115,676	130,102
Apples (fresh).....	268,085	321,001	322,730	238,999	249,381
Other fruit (fresh).....	372,228	310,424	365,286	394,769	425,155
Potatoes.....	428,098	412,784	504,210	407,969	455,178
Other fresh vegetables.....	247,143	232,277	261,652	234,297	275,803
Other agricultural products.....	781,112	831,101	907,976	928,702	1,033,223
Totals, Agricultural Products.....	18,901,021	16,158,883	16,629,926	15,716,120	16,995,826
Animal Products.					
Horses.....	45,081	41,341	63,382	53,707	71,436
Cattle and calves.....	378,472	408,879	475,712	500,044	590,311
Sheep.....	58,705	56,725	52,619	48,589	48,488
Hogs.....	252,791	249,457	230,313	200,177	242,567
Dressed meats (fresh).....	424,568	457,986	525,446	469,815	487,812
Dressed meats (cured, salted, canned).....	133,863	167,105	188,326	146,528	155,325
Other packing-house products (edible).....	218,702	213,420	204,647	120,536	139,412
Poultry.....	106,486	118,960	107,673	80,663	91,962
Eggs.....	131,415	130,423	128,168	99,443	92,217
Butter.....	158,208	166,648	157,321	135,052	135,123
Cheese.....	66,365	59,878	62,834	63,301	72,167
Wool.....	37,267	50,086	38,985	47,783	48,765
Hides and leather.....	94,811	121,425	119,110	139,447	134,013
Other animal products (non-edible).....	73,725	76,693	91,167	106,112	121,647
Totals, Animal Products.....	2,180,459	2,319,026	2,445,703	2,211,197	2,431,245
Mineral Products.					
Anthracite coal.....	2,544,545	2,302,021	2,786,704	2,629,229	2,749,701
Bituminous coal.....	8,189,583	7,926,628	9,585,322	9,174,105	9,957,016
Lignite coal.....	2,607,094	2,348,738	2,467,519	2,574,087	2,749,419
Coke.....	1,043,237	1,125,900	1,328,019	1,242,068	1,351,663
Iron ore.....	8,367	7,668	12,052	15,089	11,474
Copper ore and concentrates.....	44,982	14,791	20,109	12,534	11,114
Other ores and concentrates.....	598,929	926,486	2,001,416	2,078,721	2,687,307
Base bullion, matte, pig and ingot (non-ferrous metals).....	346,331	461,950	709,803	864,727	975,969
Sand and gravel.....	1,402,078	677,865	1,054,855	1,179,721	1,286,601
Stone (crushed, ground, broken).....	783,025	500,439	785,336	576,911	1,069,223
Slate, dimension or block stone.....	175,951	79,657	84,440	139,709	106,824
Crude petroleum.....	373,832	394,021	463,488	460,559	510,701
Asphalt (natural, by-product petroleum).....	115,357	89,308	126,693	181,940	185,177
Salt.....	259,378	257,413	289,290	286,459	289,890
Other mineral products.....	1,010,505	1,269,154	1,945,133	2,676,793	2,840,608
Totals, Mineral Products.....	19,503,194	18,382,039	23,660,188	24,092,652	26,782,690
Forest Products.					
Logs, posts, poles, piling.....	792,316	740,532	949,184	1,156,773	1,060,497
Cordwood and other firewood.....	1,186,067	1,393,579	1,568,669	1,421,851	1,367,039
Ties.....	45,353	32,830	43,043	56,495	57,317
Pulpwood.....	1,300,749	1,395,709	2,023,577	2,146,535	1,973,201
Lumber, timber, box, crate and cooper-age material.....	2,119,762	2,395,982	2,866,283	3,058,689	3,441,123
Other forest products.....	276,303	306,325	440,364	422,024	401,875
Totals, Forest Products.....	5,720,550	6,264,957	7,891,120	8,262,367	8,301,052

22.—Commodities Hauled as Freight on Steam Railways during the calendar years 1932-36—concluded.

Group and Product.	1932.	1933.	1934.	1935.	1936.
	tons.	tons.	tons.	tons.	tons.
Manufactures and Miscellaneous.					
Gasoline.....	1,358,944	1,159,067	1,233,554	1,200,347	1,222,559
Petroleum oils and other petroleum products (except asphalt and gasoline)...	724,127	654,401	742,067	746,311	766,283
Sugar.....	275,074	280,986	306,764	310,590	332,455
Iron, pig and bloom.....	84,127	96,470	178,652	176,539	225,977
Rails and fastenings.....	46,512	19,788	78,268	76,057	87,876
Iron and steel (bar, sheet, structural pipe).....	482,688	420,167	703,674	944,279	1,208,435
Castings, machinery and boilers.....	155,848	145,400	162,083	181,658	237,314
Cement.....	507,006	350,577	485,313	432,694	534,028
Brick and artificial stone.....	155,899	118,758	195,755	207,344	264,392
Lime and plaster.....	191,912	182,285	193,794	204,078	232,018
Sewer pipe and drain tile.....	35,413	19,666	19,750	26,237	28,759
Agricultural implements and vehicles other than automobiles.....	57,483	64,071	104,484	150,466	168,299
Automobiles, trucks and parts.....	774,383	935,248	1,427,551	1,772,595	1,815,404
Household goods and settlers' effects.....	45,690	52,427	68,660	42,311	40,760
Furniture.....	41,742	42,173	40,672	45,260	54,601
Liquor, beverages.....	137,339	141,829	236,608	253,426	295,859
Fertilizers, all kinds.....	409,010	425,050	525,347	569,208	667,585
Newsprint paper.....	1,526,223	1,469,657	1,939,326	1,968,278	2,366,404
Other paper.....	302,354	349,650	342,280	368,683	416,019
Paper board, pulpboard and wall board (paper).....	174,637	163,834	205,281	228,075	253,222
Wood-pulp.....	580,720	750,886	802,486	884,013	994,833
Fish (fresh, frozen, cured, etc.).....	66,906	70,314	67,501	74,294	80,703
Canned goods (all canned food products except meats).....	341,378	363,606	396,081	420,439	480,440
Other manufactures and miscellaneous.....	3,770,280	3,950,099	4,723,238	5,426,354	6,298,783
Merchandise (all L.C.L. freight).....	2,256,563	2,012,711	2,230,379	2,149,228	2,262,745
Totals, Manufactures and Misc.	14,502,258	14,239,120	17,409,568	18,838,764	21,335,753
Grand Totals.....	60,807,482	57,364,025	68,036,505	69,141,100	75,846,566

Railway Accidents.—The numbers of passengers, employees and others killed or injured in steam railway accidents are given in summary form from 1920 to 1936 in Table 23, and in detailed analysis for 1934 to 1936 in Table 24. All injuries to passengers are included, no matter how slight, but for employees only injuries which keep the employee from his work for at least three days during the ten days following the accident are recorded.

23.—Numbers of Passengers, Employees and Others Killed or Injured on Steam Railways, calendar years 1920-36.

NOTE.—For the years ended June 30, 1888 to 1919, see Canada Year Books, 1910, p. 378, and 1922-23, p. 635.

Year.	Passengers.		Employees.		Others.		Totals.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1920.....	29	481	167	7,719	197	480	393	8,680
1921.....	5	259	156	6,583	193	394	354	7,236
1922.....	11	369	122	8,361	208	517	341	9,247
1923.....	15	437	167	9,382	165	539	347	10,358
1924.....	19	432	127	8,862	216	514	362	9,808
1925.....	5	401	105	8,256	199	642	309	9,299
1926.....	20	446	127	10,622	312	638	459	11,706
1927.....	14	569	131	11,057	256	695	401	12,321
1928.....	15	389	140	12,626	352	790	507	13,805
1929.....	20	551	118	12,483	293	809	431	13,843
1930.....	15	548	103	9,678	345	837	463	11,063
1931.....	3	399	55	5,966	202	830	260	7,195
1932.....	7	342	77	4,631	242	598	326	5,571
1933.....	8	319	53	4,409	219	645	280	5,373
1934.....	16	432	57	5,179	242	589	315	6,200
1935.....	10	440	70	5,221	271	625	351	6,282
1936.....	6	691	93	6,338	282	703	381	7,732

The number of passengers killed in accidents dropped from 10 in 1935 to 6 in 1936. None of these was killed in collisions or derailments. The passengers injured in accidents which resulted from the movement of trains (Table 24), as distinct from all accidents, increased from 432 in 1935 to 657. The number of employees killed increased from 43 in 1935 to 83 and the number injured increased from 1,026 to 1,293. The number of other persons killed in train accidents increased from 269 to 273. The number of motorists killed decreased from 106 to 105 and the number injured increased from 213 to 266. Railway employees were absent from their duties because of injuries received in accidents (train and non-train) for 181,662 days as against 150,615 days in 1935.

These accidents include all accidents in which railway trains were involved and accidents on railway property. The classification of accidents used in the Bureau's vital statistics classes collisions between motor vehicles and trains as motor vehicle accidents; also provincial statistics of motor vehicle accidents class these as motor vehicle accidents and consequently adjustments should be made when compiling total accidental deaths of all kinds or comparing results of accidents of different kinds, such as train and motor vehicle.

24.—Numbers of Persons Killed or Injured on Steam Railways in the calendar years 1934-36.

(A) IN ACCIDENTS RESULTING FROM MOVEMENT OF TRAINS, LOCOMOTIVES, OR CARS

Item.	1934.		1935.		1936.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Description of Persons—						
Passengers.....	16	417	10	432	6	657
Employees.....	43	1,119	43	1,026	83	1,293
Trespassers.....	158	235	145	237	150	186
Non-trespassers.....	77	273	123	294	122	358
Postal clerks, expressmen, etc.....	1	62	1	74	1	78
Totals.....	295	2,106	322	2,063	362	2,572
Description of Accident (Employees and Passengers only)—						
Coupling and uncoupling.....	2	45	3	43	3	68
Collisions.....	16	99	4	46	27	265
Deraillments.....	6	53	2	62	6	76
Parting of trains.....	Nil	7	Nil	10	Nil	Nil
Locomotives or cars breaking down.....	Nil	2	Nil	Nil	Nil	Nil
Falling from trains or cars.....	4	88	14	87	7	137
Getting on or off trains.....	4	316	6	283	5	285
Struck by trains, etc.....	18	73	18	63	23	56
Overhead obstruction.....	Nil	1	Nil	1	Nil	2
Other causes.....	9	852	6	863	18	1,061
Totals.....	59	1,536	53	1,458	89	1,950

(B) IN ACCIDENTS OTHER THAN THOSE RESULTING FROM MOVEMENT OF TRAINS, LOCOMOTIVES, OR CARS.

Description of Persons.	1934.		1935.		1936.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Stationmen.....	1	486	1	491	2	592
Shopmen.....	4	1,291	6	1,377	1	1,518
Trainmen and trackmen.....	5	2,016	19	2,105	6	2,706
Other employees.....	4	267	1	222	1	229
Passengers.....	Nil	15	Nil	8	Nil	34
Others.....	6	19	2	20	9	81
Totals.....	20	4,094	29	4,223	19	5,160

Section 2.—Electric Railways.*

The cheap and reasonably rapid conveyance of human beings is a necessity of modern urban life. One important means by which this necessity is supplied throughout Canada is the electric street railway, operated by hydro-electric energy in the majority of cases.

Historical.—Replacing the horse-car systems, used in Montreal and Toronto as early as 1861, electric street railways were first seen in operation in Canada in 1885, when a successful experimental railway was constructed and operated at the Toronto exhibition grounds. Before many years their safety and convenience resulted in the discarding of the older systems. An electric system 7 miles in length was opened at St. Catharines in 1887, using the double overhead trolley. The second electric railway in Canada commenced operations in Vancouver, in June, 1890. This was followed by the completion of the Ottawa Electric Railway in 1891, and the electrification of the Montreal and Toronto systems in 1892. The street railways of other eastern cities were generally electrified during the 1890's, while in the newer western cities electricity was used from the commencement. In the cities of Eastern Canada, electric street railways are generally operated by private companies under city franchises, while in a considerable number of cities in Ontario and the West the street railways are owned and operated by the municipalities, a fact indicated in Table 27.

Many difficulties are met in operating the cars during the winter season, owing to the heavy falls of snow. This, however, has been overcome by the use of sweepers, scrapers, and ploughs. The single overhead trolley system has been found the most suitable and is in general use. During the past few years an increasing number of motor buses have been used; in 1924 only 48 were operated, but by 1936 the number had increased to 605.

In addition to street railways in the cities there are several systems serving suburban areas and also doing an inter-urban business, but this latter class of service is fast being supplanted by bus service. Indeed the development of motor vehicles, while providing competition for all forms of rail transportation, has affected electric railways more seriously than steam railways. The dependence of the former upon short-distance passenger traffic renders them particularly susceptible to the competition of motor vehicles. Since the War, a number of electric railways have been abandoned, first main track mileage has declined 28 p.c. since 1925 (see Table 28, p. 667), while even in the larger cities electric railways have generally been obliged to increase their tariffs owing to the slow growth or actual decline of traffic.

Subsection 1.—Equipment of Electric Railways.

Table 25 shows details of the track mileage and of the rolling-stock of electric railways in the four latest years. Statistics of the first and second main track mileage in each year since 1919 will be found in Table 28 of Subsection 3, and of the mileage operated by individual companies in Table 27 of Subsection 2.

* Revised and checked by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch publishes an annual report on Electric Railways in Canada.

25.—Mileage and Equipment of Electric Railways, calendar years 1933-36.

Item.	1933. ¹	1934. ¹	1935. ¹	1936.	Equipment.	1933.	1934.	1935.	1936.
	miles.	miles.	miles.	miles.		No.	No.	No.	No.
Length of first main track.....	1,298	1,286	1,268	1,247	Passenger Cars— Closed.....	3,416	3,438	3,395	3,329
Length of second main track.....	559	557	558	553	Open.....	32	19	21	17
Totals, Main Track.	1,857	1,843	1,826	1,800	Combination passenger and baggage..	12	9	11	9
Length of sidings and turnouts.....	275	272	270	272	Without electrical equipment.....	313	282	280	250
Totals, Computed as Single Track..	2,132	2,115	2,096	2,072	Totals, Passenger Cars.....	3,773	3,748	3,707	3,605
					Baggage, express and mail cars.....	21	22	23	23
					Freight cars.....	298	276	270	206
					Buses.....	531	537	552	605
					Snow ploughs.....	66	66	69	72
					Sweepers.....	159	158	162	162
					Miscellaneous.....	326	344	340	348
					Locomotives.....	45	47	46	46

¹ Revised since publication of the 1937 Year Book.**Subsection 2.—Finances of Electric Railways.**

Table 26 below gives financial statistics of electric railways for each year since 1919 and Table 27 financial statistics of individual companies in the latest year.

26.—Financial Statistics of Electric Railways, calendar years 1919-36.

NOTE.—Available figures for the years 1908-18 are given at pp. 681 and 682 of the 1936 Year Book and for the years 1901-07 at pp. 608 and 609 of the 1926 Year Book.

Calendar Year.	Capital Liability.			Investment in Road and Equipment.	Gross Earnings.	Operating Expenses.	Ratio of Expenses to Receipts.	Employees.	Salaries and Wages.
	Stocks.	Funded Debt.	Total.						
	\$	\$	\$	\$	\$	\$	p.c.	No.	\$
1919.....	91,757,418	81,283,922	173,041,340	1	40,698,586	31,385,702	77-12	16,940	20,211,576
1920.....	91,321,955	79,504,449	170,826,404	1	47,047,246	37,242,483	79-16	17,341	24,235,932
1921.....	91,169,885	86,017,551	177,187,436	1	44,539,832	35,945,316	80-71	17,015	23,976,728
1922.....	76,949,185	111,309,789	188,258,974	186,519,452	49,660,485	35,986,872	72-47	18,099	24,988,119
1923.....	76,674,185	122,395,685	199,069,870	197,171,429	50,191,387	36,171,923	72-07	17,779	25,039,286
1924.....	76,482,085	137,285,575	213,767,660	210,915,798	49,439,559	36,125,213	73-07	17,379	24,964,441
1925.....	58,567,242	163,201,978	221,769,220	219,321,511	49,626,231	35,426,487	71-39	16,933	24,543,856
1926.....	57,779,518	158,029,002	215,808,520	222,424,345	51,723,199	36,453,709	70-50	16,961	24,686,549
1927.....	58,873,778	163,678,939	222,552,717	227,979,861	53,506,401	37,616,568	70-30	18,090	25,891,020
1928.....	50,653,071	170,649,165	221,302,236	230,694,258	55,632,761	38,782,719	69-71	18,697	26,494,062
1929.....	54,453,321	167,969,494	222,422,815	240,110,655	58,268,980	40,085,140	68-79	18,801	26,984,061
1930.....	53,048,929	171,040,610	224,089,539	240,293,974	54,719,259	39,125,515	71-50	18,340	26,954,994
1931.....	45,155,649	170,662,447	215,818,096	234,384,558	49,088,310	35,367,068	72-05	17,135	24,647,391
1932.....	40,101,930	163,210,624	203,312,554	225,747,251	43,339,381	31,516,943	72-72	15,961	21,534,419
1933.....	39,851,230	160,247,640	200,098,870	223,704,367	39,389,965	27,917,265	72-73	14,883	18,692,236
1934.....	39,851,230	158,276,141	198,127,371	224,398,598	40,048,136	28,036,754	70-01	14,544	18,546,750
1935.....	36,827,740	170,363,299	207,191,039	215,007,166	40,442,320	28,009,013	69-26	14,381	18,649,517
1936.....	36,727,740	168,334,613	205,062,353	214,820,798	41,391,927	28,807,311	69-60	14,280	18,958,832

¹ Not available.

27.—Mileage, Capital, Earnings, Operating Expenses, Passengers, Employees, and Salaries and Wages of Electric Railways in Canada, calendar year 1936.

Name of Railway.	Mileage Operated (Total Main Track).	Capital Liability.	Gross Earnings.	Operating Expenses.	Fare Passengers Carried.	Em- ployees.	Salaries and Wages.
	miles.	\$	\$	\$	No.	No.	\$
Brantford Municipal ¹	18.79	806,209	104,587	99,745	2,021,093	54	59,263
British Columbia.....	302.14	23,438,206	5,081,932	3,995,903	69,475,881	1,942	3,003,816
Calgary Municipal ¹	77.02	2,855,644	638,113	506,184	10,192,927	211	301,408
Canadian Pacific ²	75.30	4,368,500 ²	394,888	375,700	775,210	193	245,326
Cape Breton Tramways..	21.30	5,400	83,755	78,948	1,013,213	34	48,056
Cornwall St. Rly., Light and Power Co.....	5.50	330,000	134,174	75,246	1,431,245	48	54,853
Edmonton Radial ¹	52.50	964,041	681,558	519,015	13,904,716	274	366,777
Fort William Street ¹	25.49	864,000	118,783	124,638	1,900,364	70	76,734
Guelph Radial ^{1,3}	6.41	340,742	60,090	66,810	863,559	29	33,748
Hamilton Street ^{3,4}	40.17	3,205,000	1,005,860	854,458	18,414,846	343	443,442
Hull Electric.....	26.73	292,000	171,899	146,266	2,076,748	89	83,057
International Transit ¹	6.14	150,000	42,040	35,722	824,783	18	23,412
Kitchener Public Utilities St. Rly. Dept. ¹	9.41	116,180	101,179	76,353	2,240,440	33	50,719
Lethbridge Municipal ¹	11.00	455,167	34,598	36,930	607,591	16	24,168
Levis Tramways Co.....	11.50	1,115,000	108,334	101,710	1,564,405	76	70,458
London and Port Stanley (Lessees).....	26.70	1,775,194 ⁵	304,241	284,045	402,044	91	121,673
London and Port Stanley (Lessors) ¹	—	1,318,661	—	—	—	—	—
London Street.....	9.46	1,067,480	493,589	421,027	8,852,399	198	232,649
Montreal Tramways.....	274.51	55,321,700	12,463,554	7,658,867	198,626,907	4,035	5,061,172
Montreal and Southern Counties.....	54.01	500,000 ⁶	287,019	350,468	2,103,653	182	197,016
Nelson Municipal ¹	3.38	7	15,639	25,033	365,178	14	13,914
New Brunswick Power Co. Niagara, St. Catharines and Toronto.....	23.00	2,817,120 ⁸	281,494	263,131	5,555,583	124	128,262
North Yonge Railways ^{1,10}	59.54	925,000 ⁹	573,467	523,195	3,198,721	275	327,965
Nova Scotia Light and Power Co.....	10.25	107,549 ⁸	70,715	73,530	840,004	10	10
Oshawa.....	24.91	2,438,186 ⁸	541,563	389,673	9,253,262	174	278,504
Ottawa.....	9.06	40,000	247,908	149,506	638,762	76	93,469
Port Arthur Civic ¹	51.74	3,678,899	1,826,291	815,545	21,179,180	425	549,601
Quebec Railway, Light and Power Co. ¹¹	19.53	469,634	135,048	109,921	2,156,921	54	72,180
Regina Municipal ¹	38.14	11	856,566	814,975	14,530,494	400	415,232
Sandwich, Windsor and Amherstburg ¹	28.62	2,008,018	280,965	201,878	5,199,890	104	139,832
Saskatoon Municipal ¹	61.02	6,816,205	576,342	514,126	8,431,055	206	313,748
Shawinigan Falls Term- inal.....	23.35	1,314,536	232,664	166,123	3,795,742	82	107,328
Suburban Rapid Transit Co.....	3.39	368,727	99,883	61,341	7	19	29,533
Sudbury, Copper Cliff Suburban.....	10.67	600,000 ¹²	116,132	89,241	1,985,670	18	18
Toronto Transportation Commission ¹	7.90	217,100	90,915	68,588	1,058,430	22	30,456
Township of York and Town of Weston ^{1,10}	214.90	26,375,000	10,436,936	6,243,420	154,064,056	3,206	4,627,384
Winnipeg.....	14.06	996,534	205,106	158,282	4,137,870	10	10
Winnipeg, Selkirk and Lake Winnipeg.....	102.66	55,700,721 ¹²	2,844,690	2,197,605	40,390,213	1,079	1,298,155
	39.66	900,000 ¹²	149,410	134,163	817,842	34	35,522
Totals.....	1,799.86	205,062,353	41,391,927	28,807,311	614,890,897	14,280	18,958,832

¹ Municipally owned. ² \$4,264,725 held by Canadian Pacific Railway. ³ Operated by the Hydro-Electric Power Commission of Ontario. ⁴ Provincially owned. ⁵ Debentures of the London Rly. Commission. ⁶ \$310,500 held by Canadian National Rlys. and \$189,500 included in stock outstanding of Canadian National Rlys. ⁷ Not reported. ⁸ Investment in road and equipment. ⁹ Held by Canadian National Rlys. ¹⁰ Operated by Toronto Transportation Commission. ¹¹ Citadel division operations only. ¹² Total capital and operations of the Montmorency division are included in steam railways. ¹³ Represents all divisions of the company. ¹⁴ Operated by Winnipeg Electric Railway.

Subsection 3.—Traffic of Electric Railways.

The most important traffic statistics for electric railways are given for each year since 1919 in Table 28. Passenger traffic on individual railways is included in Table 27 above. Accidents to passengers and employees are given in Table 29.

28.—Summary Statistics of Electric Railway Operation, calendar years 1919-36.

NOTE.—Owing to lack of comparability in some particulars, figures prior to 1919 are omitted here but they may be found at p. 681 of the 1936 Year Book for the years 1911-18 and at p. 676 of the 1933 Year Book for years 1901-10.

Year.	Mileage in Operation.		Car Mileage.			Passengers.	Freight.
	First Main Track. ¹	Second Main Track.	Passenger.	Other.	Total.		
	miles.	miles.	miles.	miles.	miles.	No.	tons.
1919.....	1,679-14	484-63	107,248,202	2,958,142	110,206,344	749,334,380	2,374,612
1920.....	1,691-12	509-35	111,043,210	3,438,196	114,481,406	804,711,333	2,687,314
1921.....	1,679-73	499-58	107,141,160	4,435,789	111,576,949	719,305,441 ²	2,282,292
1922.....	1,716-96	513-22	113,403,912	3,307,277	116,711,189	738,908,949	2,441,212
1923.....	1,728-67	511-32	115,768,713	3,605,703	119,374,416	737,282,038	3,141,992
1924.....	1,729-13	524-91	116,438,733	3,364,339	119,803,072	726,497,729	2,543,669
1925.....	1,729-88	543-47	115,715,733	3,968,418	119,684,151	725,491,101	2,701,823
1926.....	1,676-54	553-39	118,566,321	4,368,734	122,935,055	748,710,836	3,489,183
1927.....	1,644-51	562-94	127,062,864	4,520,853	131,583,717	781,398,194	3,265,237
1928.....	1,645-58	565-56	128,888,905	4,800,684	133,689,589	808,023,615	3,888,672
1929.....	1,629-12	565-27	134,666,564	4,533,070	139,199,634	833,496,866	3,653,411
1930.....	1,500-52	571-37	136,240,958	3,773,642	140,014,600	792,701,493	2,872,929
1931.....	1,379-03	572-69	131,200,894	2,682,595	133,883,489	720,468,361	1,977,441
1932.....	1,306-30	560-02	123,672,220	2,213,081	125,885,301	642,831,002	1,509,561
1933.....	1,297-63	559-57	117,100,127	2,062,669	119,162,796	585,385,094	1,547,202
1934.....	1,286-16	557-14	117,678,030	2,357,595	120,035,625	595,143,903	1,939,833
1935.....	1,268-31	557-83	118,263,764	2,552,585	120,816,349	600,728,313	2,057,897
1936.....	1,247-09	552-77	119,779,505	2,465,384	122,244,889	614,890,897	2,265,023

¹ Revised since publication of the 1937 Year Book.

² The Toronto Transportation Commission, which operated for the last four months of 1921 only and did not report, would increase this number by about 80,000,000 or possibly bring it up to the 1920 record.

29.—Numbers of Passengers, Employees, and Others Killed or Injured on Electric Railways, calendar years 1919-36, with Totals from 1894 to June 30, 1919.

NOTE.—Details for years ended June 30, 1900-19, are given on p. 611 of the 1926 Year Book.

Calendar Year.	Passengers.		Employees.		Others.		Totals.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Totals, 1894 to June 30, 1919....	259	23,802	162	5,009	833	10,608	1,254	39,419
1919.....	4	1,717	29	951	58	1,505	91	4,173
1920.....	9	1,968	7	653	75	1,434	91	4,060
1921.....	5	1,110	8	609	35	666	48	2,385
1922.....	6	2,260	10	873	31	700	47	3,833
1923.....	6	2,465	11	1,652	45	790	62	4,907
1924.....	2	2,279	6	1,262	54	824	62	4,365
1925.....	9	2,272	5	1,736	37	744	51	4,752
1926.....	3	2,420	7	1,642	66	879	76	4,941
1927.....	Nil	2,090	7	1,508	71	1,260	78	4,858
1928.....	1	2,735	12	1,114	86	1,139	99	4,988
1929.....	5	2,808	5	1,200	93	1,372	103	5,380
1930.....	8	2,790	6	1,003	50	1,269	64	5,062
1931.....	1	2,245	3	758	61	1,144	65	4,147
1932.....	3	2,098	2	565	74	879	79	3,542
1933.....	Nil	1,385	1	333	32	1,184	33	2,902
1934.....	4	1,666	2	279	49	734	55	2,679
1935.....	1	1,517	2	388	61	652	64	2,557
1936.....	Nil	1,503	2	280	41	651	43	2,434

Section 3.—Express Companies.*

"Express service is an expedited freight service on passenger trains". But express companies do not own the means of performing their services; they use railway facilities by virtue of contracts with the railway companies. Express companies in Canada have had close relations with the railways practically from the beginning. A brief history of the various express companies will be found on pp. 611-612 of the 1926 Year Book.

* Revised and checked by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch issues an annual report on Express Statistics.

Goods are sent by express for quick transit, so that express rates do not compete with freight rates. Thus in its first tariff the Dominion Express Co., in pursuance of its contract with the Canadian Pacific Railway, gave a rate of $2\frac{1}{2}$ times the maximum first-class railway freight rate for the same goods carried the same distance. The majority of the contracts between express and railway companies for carrying express freight are on the basis of a percentage of the gross express revenue. The rates are subject to the approval of the Board of Railway Commissioners.

Express Company Operations.—During 1936, the latest year for which statistics are available, three Canadian and one American express organizations operated in Canada. The Canadian Pacific Express Co., formerly the Dominion Express Co., is a subsidiary of the Canadian Pacific Railway and handles the express business on the railways and the inland and ocean steamship lines of the parent company. The express business of the Canadian National system and Northern Alberta railway is handled by departments of the respective railways. The Railway Express Agency, Inc., operates over the Canadian sections of United States railways and over the route from Skagway to points in Yukon. These companies are all organized under powers conferred by Acts of the Dominion Parliament and their business consists in the expeditious shipment of valuable live stock, and such perishable commodities as fresh fish, fruit, etc., the forwarding of parcels and baggage and the issue of money orders, travellers cheques, letters of credit and other forms of financial paper. No statistics are available regarding the volume of traffic carried by express. Much of the traffic, of course, consists of parcels and small lots which would make statistical classification and measurement very difficult. However, there is also an important movement in car lots of live stock, fresh fish, fruit, vegetables and other perishable commodities. The total capital liabilities of the three Canadian companies and departments stood at \$6,239,535 on Dec. 31, 1936.

In the following tables the amounts paid by express companies to the carriers, i.e., railways, steamship lines, etc., for transporting the express matter, are shown under the heading "express privileges". Of the total of 63,146 miles operated in 1936, 42,192 were over steam railways, 280 over electric railways, 14,227 on ocean steamship services (mainly by the Canadian Pacific lines), 5,188 miles on inland or coastal steamboat routes, 397 by aircraft, and 862 miles over highways by motor trucks.

30.—Summary Statistics of Revenues and Expenses of Express Companies, calendar years 1919-36.

NOTE.—Corresponding figures for the years ended June 30, 1911-18, were published at p. 673 of the 1927-28 Year Book.

Calendar Year.	Gross Earnings.	Operating Expenses.	Express Privileges.	Net Operating Revenue.
	\$	\$	\$	\$
1919.....	24,933,219	13,227,652	12,936,615	- 1,231,048
1920.....	30,512,504	16,120,880	16,009,460	- 1,617,836
1921.....	32,504,894	15,601,187	16,549,915	353,792
1922.....	28,697,332	13,596,518	14,581,789	519,025
1923.....	27,625,700	13,217,780	14,342,410	65,510
1924.....	26,196,017	12,723,651	13,557,168	- 84,802
1925.....	25,876,342	12,336,485	13,312,960	226,897
1926.....	26,554,378	12,442,257	13,466,863	645,258
1927.....	26,532,182	12,548,374	13,275,355	708,453
1928.....	27,674,270	13,032,376	13,459,187	1,182,707
1929.....	27,758,385	13,480,028	13,598,575	679,782
1930.....	24,352,181	12,759,439	12,380,060	- 787,318
1931.....	20,115,285	11,292,957	10,909,184	- 2,086,856
1932.....	16,870,806	9,479,802	7,307,980 ¹	83,024
1933.....	15,226,015	8,497,892	6,605,225	122,898
1934.....	16,206,171	8,473,601	7,268,616	463,954
1935.....	16,592,746	8,960,675	7,352,913	279,158
1936.....	17,169,315	9,414,746	7,478,874	275,695

¹ Decrease due largely to revision of basis of payment by Canadian Pacific Express Co.

31.—Revenues, Expenses, and Operating Mileage of Express Companies, by Companies, calendar years 1935 and 1936.

Company.	Gross Earnings.	Operating Expenses.	Express Privileges.	Net Operating Revenue.	Mileage Operated.
	\$	\$	\$	\$	miles.
1935.					
Canadian National Railways.....	8,434,764	4,517,589	3,757,068	160,107	24,192
Canadian Pacific Express.....	7,560,810	4,188,677	3,278,997	93,136	33,184
Northern Alberta Railways.....	107,027	36,113	59,132	11,782	928
Railway Express Agency.....	490,145	218,296	257,716	14,133	4,688
Totals.....	16,592,746	8,960,675	7,352,913	279,158	62,992
1936.					
Canadian National Railways.....	8,628,310	4,686,520	3,835,381	106,409	24,104
Canadian Pacific Express.....	7,926,998	4,464,075	3,323,849	139,074	33,250
Northern Alberta Railways.....	121,069	38,940	65,895	16,234	928
Railway Express Agency.....	492,938	225,211	253,749	13,978	4,864
Totals.....	17,169,315	9,414,746	7,478,874	275,695	63,146

32.—Business Transacted by Express Companies in Financial Paper, calendar years 1932-36.

Description.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$
Money orders, domestic.....	35,999,361	34,696,463	40,115,447	44,560,510	52,581,553
Money orders, foreign.....	479,738	511,561	431,533	502,438	577,720
Travellers cheques, domestic.....	2,538,537	2,549,571	3,352,438	2,997,849	3,150,798
Travellers cheques, foreign.....	974,465	832,488	952,267	1,186,495	1,593,840
"C.O.D." cheques.....	4,448,486	4,186,525	4,649,004	4,839,649	5,007,286
Telegraphic transfers.....	324,118	271,682	252,457	249,173	212,860
Other forms.....	746,319	531,322	481,750	492,967	424,863
Totals.....	45,511,024	43,579,612	50,234,896	54,829,081	63,548,920

PART III.—ROAD TRANSPORTATION.*

Since the recent development of highways in Canada has been almost exclusively for the purpose of providing roadbed for motor vehicle traffic, highways and motor vehicles have been treated since the 1937 edition as related features of transportation, instead of being dealt with in separate parts of the chapter as in former editions. After an introductory section which briefly summarizes provincial regulations regarding motor vehicles and motor traffic, the whole subject of road transportation is dealt with under the headings of facilities, finances, and traffic, similarly to the treatment of other forms of transportation.

Section 1.—Provincial Motor Vehicle and Traffic Regulations.†

NOTE.—In this Section, it is obviously impossible to include the great mass of detailed regulations in force in each province. The purpose in view is to provide only the more important general information. For detailed regulations for specific provinces the sources of information are given on pp. 670-671. See also "The Highway and Motor Vehicle in Canada", an annual bulletin published by the Dominion Bureau of Statistics and obtainable from the Dominion Statistician, price 25 cents.

General.—The licensing of motor vehicles and the regulation of motor vehicle traffic lies within the legislative jurisdiction of the Provincial Governments in

*Revised by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch publishes an annual report "The Highway and Motor Vehicle in Canada".

†The information in this Section has been revised from material provided by the officials in charge of the administration of Motor Vehicle and Traffic Acts and Regulations in the individual provinces.

Canada. Regulations which apply in all the provinces may be summarized as follows:—

Operators' Licences.—The operator of a motor vehicle must be over a specified age (usually 16 years) and must carry a licence, obtainable only after prescribed qualification tests and renewable annually. Special licences are required for chauffeurs.

Motor Vehicle Regulations.—In general, all motor vehicles and trailers must be registered annually, usually for the calendar year, with the payment of specified fees, and must carry two registration plates, one on the front and one on the back of the vehicle (one only, for the back, in the case of trailers). A change in ownership of the vehicle must be recorded with the registration authority. However, exception from registration is granted for a specified period (usually at least 90 days) in any year to visiting private vehicles registered in another province or a State which grants reciprocal treatment. Further regulations require a safe standard of efficiency in the mechanism of the vehicle and in its brakes, and provide for its equipment with non-glare headlights and a proper rear light, with a satisfactory locking device, a muffler, a windshield wiper, and a rear-vision mirror.

Traffic Regulations.—In all the provinces, vehicles keep to the right-hand side of the road. Motorists are everywhere required to observe traffic signs, lights, etc., placed at strategic points on highways and roads. While permissible speeds vary in different provinces, slower speeds are always required in cities, towns and villages, in passing schools and public playgrounds, at road intersections, railway crossings, or at other places or times where the view of the highway for a safe distance ahead is in any way obscured. Motor vehicles must not pass a street car which has stopped to take on or discharge passengers except where safety zones are provided. Accidents resulting in personal injury or property damage must be reported to a provincial or municipal police officer and any driver involved must not leave the scene of accident until he has rendered all possible aid.

Penalties.—These ascend in scale from small fines for minor infractions of any of the regulations to a suspension of the operator's driving permit, impounding of the car or imprisonment for serious infractions, recklessness, driving without an operator's licence, and especially for attempting, while intoxicated, to operate a motor vehicle.

There is such wide variation in the different provinces regarding the basis of licences and fees, the regulation of public commercial vehicles, details of traffic rules, speed, and the use of motor vehicles, that it is impossible even to outline them satisfactorily in the space available here. The most important features are summarized in the annual bulletin referred to in the headnote to this Section, p. 669. The authorities responsible for the administration of motor vehicles and the legislation governing vehicles and traffic are given below for each province.

Prince Edward Island.—*Administration.*—The Provincial Secretary, Charlottetown. *Legislation.*—The Highway Traffic Act (c. 2, 1936) and amendments.

Nova Scotia.—*Administration.*—Motor Vehicle Branch, Department of Highways, Halifax. *Legislation.*—The Motor Vehicle Act (c. 6, 1932) and amendments.

New Brunswick.—*Administration.*—Motor Vehicle Branch, Department of Public Works, Fredericton. *Legislation.*—The Motor Vehicle Act (c. 20, 1934).

Quebec.—*Administration.*—Motor Vehicle Bureau, Office of the Provincial Treasurer, Quebec. *Legislation.*—The Motor Vehicle Act (c. 35, R.S.Q. 1925) and amendments.

Ontario.—*Administration.*—Motor Vehicles Branch, Department of Highways, Toronto. *Legislation.*—The Highway Traffic Act (c. 251, R.S.O. 1927) and amendments.

Manitoba.—*Enforcement.*—Attorney General. *Registrations.*—Treasurer, Tax Commission Office, Winnipeg. *Legislation.*—The Highway Traffic Act (c. 19, 1930) and amendments.

Saskatchewan.—*Administration.*—Motor Licence Division, Provincial Tax Commission, Revenue Building, Regina. *Legislation.*—The Vehicles Act (c. 68, 1935) and amendments.

Alberta.—*Administration.*—Motor Vehicle Branch, Department of the Provincial Secretary, Edmonton. *Legislation.*—The Vehicles and Highway Traffic Act (c. 31, 1924) and amendments.

British Columbia.—*Administration.*—Motor Vehicle Branch, Commissioner of Provincial Police, Victoria. *Legislation.*—The Motor Vehicle Act (c. 195, R.S.B.C. 1936) and the Highway Act (c. 116, R.S.B.C. 1936) and amendments.

Yukon.—*Administration.*—Territorial Secretary, Dawson, Yukon. Information regarding regulations may also be obtained from the Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa. *Legislation.*—The Motor Vehicle Ordinance, No. 14, 1914, and amendments.

Section 2.—Roads and Vehicles.

The facilities for road transportation are dealt with in two subsections devoted, respectively, to roads and highways and to motor vehicles.

Subsection 1.—Roads and Highways.

Historical.—A brief description of the early colonization roads in Canada was given at p. 733 of the 1934-35 Year Book.

Recent Highway Development.—With the rapid increase in the percentage of motor-car owners to population (see pp. 672-673) the demand for improved roads has become more and more insistent since the War. Furthermore, the advantages to be gained by attracting touring motorists have been a powerful incentive to governing bodies to improve trunk roads and scenic highways within their jurisdictions. One sphere where the motor car has been of special economic advantage has been in rural areas, where its speed and economy are a great improvement over the old horse-drawn vehicle. As a result, in the Census of 1931 every second farm reported a farm-owned motor vehicle (1.96 farms per farm-owned motor vehicle). This widespread rural ownership of automobiles has resulted in the improvement of secondary rural roads.

The table of road mileages, p. 672, includes all roads under provincial jurisdiction and local roads in the Maritime Provinces and Ontario and estimates of local roads in the four western provinces. There are great stretches of country in the northern portions of Quebec, Ontario, the Prairie Provinces, and British Columbia with very few people and very few roads, but the southern portions are well supplied. The Trans-Canada Highway is now under construction, running from the Atlantic to the Pacific oceans entirely in Canadian territory.

A start has been made on the compilation of statistics of urban streets. For 1936 the mileage reported was 11,662, of which 2,340 was asphalt, 2,387 was gravel and crushed stone surface, and 3,054 was unsurfaced. The remaining 3,881 miles was water-bound macadam, bituminous and other surfaces. These statistics do not include all urban streets, but places not included would increase the totals very little.

1.—Classification of Canadian Highways, by Provinces, 1936.

Province.	Year Ended—	Earth.	Gravel and Stone.	Water-Bound Macadam.	Portland Cement Concrete.	Bituminous Macadam.	Bituminous Concrete.	Asphalt.	Total.
		miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.
P.E. Island.....	Dec. 31, 1935	3,500	196	1	4	1	12	1	3,712
Nova Scotia.....	Nov. 30, 1935	10,584	4,041	1	1	31	167	1	14,825
New Brunswick..	Oct. 31, 1936	4,453	6,951	1	1	13	197	1	11,614
Quebec.....	June 30, 1936	17,468	14,593	1,263	173	185	678	1	34,834
Ontario.....	Mar. 31, 1937	19,996	45,189	244	1,776	2,043	1,112	298	70,897
Manitoba.....	Mar. 31, 1937	29,782	4,268	1	31	1	23	273	34,377
Saskatchewan....	Apr. 30, 1937	151,748	2,463	1	1	1	132	1	154,350
Alberta.....	Mar. 31, 1937	60,140	2,343	1	1	1	1	71	62,802
British Columbia	Mar. 31, 1937	13,427	8,185	42	46	947	1	71	23,037
Totals.....		311,098	88,229	1,549	2,030	3,219	2,321	713	410,448²

¹ None reported.

² Includes 839 miles of oil-treated gravel and stone and 400 miles of other surface.

Subsection 2.—Motor Vehicles.

Registration.—The increase in the use of motor vehicles in Canada has been very rapid; this is shown by the statistics of Table 2. In Table 3 the numbers of motor vehicles registered in 1935 and 1936 are given by provinces, classified as passenger cars, commercial cars or trucks, motor buses, and motor cycles.

The average population per vehicle registered was 8.9 in 1936. Canada ranked fourth in this respect, the United States being first with 4.5. On the basis of the total registration of 1,240,124, only four countries had larger numbers in 1936, viz., United States, United Kingdom, France, and Germany.

2.—Numbers of Motor Vehicles Registered in Canada, by Provinces, calendar years 1920-36.

NOTE.—Registrations given here include passenger cars, trucks, buses, motor cycles, service cars, etc., but not trailers or dealers' licences. Registrations in Yukon are included in the total for Canada. Figures for the years 1904-19 were given at p. 668 of the 1937 Year Book.

Year.	P.E. Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Canada. ¹
1920.....	1,418	12,450	11,121	41,562	177,561	38,257	60,325	38,015	28,000	408,790
1921.....	1,750	14,050	13,460	54,670	206,521	40,336	61,184	39,852	32,900	464,805
1922.....	2,154	16,029	13,611	60,940	239,296	41,870	60,645	40,366	34,385	509,382
1923.....	2,440	18,232	16,662	71,320	278,752	42,083	63,224	42,323	40,854	575,985
1924.....	2,571	20,606	19,840	84,949	306,770	43,875	69,895	48,238	48,407	645,263
1925.....	2,947	22,745	18,863	97,418	342,174	50,884	77,940	54,538	56,427	724,048
1926.....	3,448	25,746	21,421	107,994	388,349	58,292	95,967	65,101	67,810	832,268
1927.....	4,371	29,914	24,457	128,104	433,504	63,412	105,088	73,306	77,327	939,651
1928.....	5,404	35,194	27,970	148,090	487,337	70,578	119,972	88,398	86,203	1,069,343
1929.....	6,116	39,972	31,736	169,105	540,207	77,259	128,426	98,720	95,571	1,187,331
1930.....	7,376	43,029	34,699	178,548	562,506	78,850	127,193	101,119	98,938	1,232,489
1931.....	7,744	43,758	33,627	177,485	562,216	75,210	107,830	94,642	97,932	1,200,668
1932.....	6,982	41,013	28,041	165,730	531,597	70,840	91,275	86,781	91,042	1,113,533
1933.....	6,940	40,648	26,867	160,012	520,353	68,590	84,944	86,041	88,554	1,083,178
1934.....	7,206	41,932	29,094	165,526	542,245	70,430	91,461	89,369	92,021	1,129,532
1935.....	8,231	43,952	31,217	170,644	564,076	70,660	94,792	93,870	98,411	1,176,116
1936.....	7,632	46,179	33,402	181,628	590,226	74,940	102,270	97,468	106,079	1,240,124

¹ Includes registrations in Yukon.

3.—Types of Motor Vehicles Registered in Canada, by Provinces, calendar years 1935 and 1936.

Province.	Passenger Cars. ¹	Commercial Cars or Trucks. ²	Motor Buses.	Motor Cycles.	Total.
1935.	No.	No.	No.	No.	No.
Prince Edward Island.....	7,420	792	3	16	8,231
Nova Scotia.....	35,820	7,776	44	312	43,952
New Brunswick.....	26,185	4,801	58	173	31,217
Quebec.....	139,497	28,153	505	2,489	170,644
Ontario.....	489,610	69,256	704	4,506	564,076
Manitoba.....	59,470	10,520	80	590	70,660
Saskatchewan.....	75,727	18,636	64	365	94,792
Alberta.....	76,882	16,417	91	480	93,870
British Columbia.....	78,999	17,570	298	1,544	98,411
Yukon.....	134	119	1	9	263
Totals.....	989,744	174,040	1,848	10,484	1,176,116
1936.	No.	No.	No.	No.	No.
Prince Edward Island.....	6,746	852	13	21	7,632
Nova Scotia.....	37,478*	8,338	67	296	46,179
New Brunswick.....	27,731	5,407	88	176	33,402
Quebec.....	148,374	30,193	563	2,498	181,628
Ontario.....	514,211	70,693	769	4,553	590,226
Manitoba.....	61,730	12,380	170	660	74,940
Saskatchewan.....	81,519	20,220	87	444	102,270
Alberta.....	79,538	17,310	91	529	97,468
British Columbia.....	84,062	20,078	304	1,635	106,079
Yukon.....	140	145	2	13	300
Totals.....	1,041,529	185,616	2,154	10,825	1,240,124

¹ Includes taxicabs.² Includes tractors, road machines, flushers, municipal fire engines, etc.

Apparent Consumption of Automobiles in Canada.—The apparent consumption of automobiles in Canada in any year may be computed by deducting the number exported from the sum of the production and imports. Prior to 1925 the figures of apparent consumption do not show a pronounced trend but between 1925 and 1929 they increased substantially. From 1929 to 1932 the decrease was rapid and continuous but was practically halted in 1933, in which year production showed some improvement but mainly on account of the export demand. In 1936 the apparent consumption showed an increase of 3.4 p.c. over the figure for 1935.

4.—Apparent Consumption of Automobiles in Canada, 1917-36.

Year.	Production.	Imports.	Total Supply.	Exports.	Re-Exports.	Total Exports.	Apparent Consumption.
	No.	No.	No.	No.	No.	No.	No.
1917.....	93,810	16,656	110,466	9,492	567	10,059	100,407
1918.....	82,408	10,812	93,220	10,361	322	10,683	82,537
1919.....	87,535	11,750	99,585	22,949	305	23,254	76,331
1920.....	94,144	9,145	103,289	23,012	542	23,554	79,735
1921.....	66,246	7,270	73,516	10,726	254	10,980	62,536
1922.....	101,007	11,591	112,598	37,958	268	38,226	74,372
1923.....	147,202	11,822	159,024	69,920	438	70,358	88,666
1924.....	132,580	9,301	141,881	56,655	326	56,981	84,900
1925.....	161,970	14,632	176,602	74,151	341	74,492	102,110
1926.....	204,727	28,544	233,271	74,324	370	74,694	158,577
1927.....	179,054	36,630	215,684	57,414	438	57,852	157,832
1928.....	242,054	47,408	289,462	79,388	467	79,855	209,607
1929.....	262,625	44,724	307,349	101,711	671	102,382	204,967
1930.....	153,372	23,233	176,605	44,553	818	45,371	131,234
1931.....	82,559	8,738	91,297	13,813	726	14,539	76,758
1932.....	60,789	1,449	62,238	12,534	488	13,022	49,216
1933.....	65,852	1,781	67,633	20,403	497	20,900	46,733
1934.....	116,852	2,905	119,757	43,368	399	43,767	75,990
1935.....	172,877	4,111	176,988	64,330	291	64,621	112,367
1936.....	162,159	9,903	172,062	55,570	267	55,837	116,225

Section 3.—Finances of Road Transportation.

The cost of road transportation to the people of Canada might be summarized under the following headings: expenditures on roads and highways; expenditures of individuals and corporations upon owned motor vehicles; and expenditures for freight and passenger services rendered by motor vehicle public carriers such as taxi, bus, and motor transport companies. Since expenditures on roads and highways are made almost entirely by governmental bodies, fairly complete statistics are available regarding them, but, owing to the tremendous number of individuals and organizations which would have to be canvassed, no statistics are available regarding expenditures under the other two headings. By applying theoretical unit values to the automobiles registered, an estimate may be obtained of their total present value, which for 1936 was \$416,000,000.

The annual expenditure for the purchase of new motor vehicles is given for the year 1930 and since 1932 in the chapter on Internal Trade at p. 627. Unfortunately, this series as yet covers only a few years, several of which were years of depression, so that its significance will increase with a longer and more representative period. The retail value of new cars sold in 1932 was \$45,261,000, while in 1937 it had risen to \$148,486,000. The average for the seven years, 1930 and 1932-37, was \$93,795,000.

Some indication of the annual expenditures for the servicing of motor vehicles may be obtained from the statistics of retail merchandising appearing on pp. 626-627. Sales of gasoline are given on p. 678. No statistics are available regarding the earnings of motor transport and bus companies.

Expenditures on Roads and Highways.—Roads in Canada, except in the Territories and the National Parks are under the jurisdiction of provincial and municipal authorities. Unfortunately, there are no comprehensive or comparable statistics available regarding expenditures prior to 1928. Expenditures by the Dominion Government, outside of the National Parks, have taken the form of subsidies to the provinces for specific highways and have been made under the Canada Highways Act, 1919, (see p. 669 of the 1929 Year Book) largely in the few years immediately after the War and under relief legislation during the depression, to aid in providing useful employment. The present report includes expenditures on roads in the National Parks by the Dominion Government, also those on road construction work undertaken through the Department of National Defence to relieve unemployment in the western provinces. These expenditures, direct and as road subsidies, are shown in Table 5. The net expenditures here are the expenditures less subsidies received or collectable. They cover only national and provincial highways, secondary highways and other important roads to which the Provincial Governments contribute, together with the bridges or ferries necessary to such highways. The figures do not include expenditures on roads or streets within urban municipalities nor expenditures by rural municipalities on local roads to which no contribution is made by the Provincial Governments. Although the record of expenditures on roads by municipalities is incomplete, the expensive roads to construct and maintain are under provincial jurisdiction, so that only a small percentage of the total expenditures is omitted. In the Maritime Provinces all road expenditures are made by the Provincial Governments.

In accordance with an agreement of the Conference of British Commonwealth Statisticians, which met in Ottawa in 1935, an effort was made to collect statistics regarding urban streets and roadways beginning with 1935. The resulting statistics

appear in an appendix to the report "The Highway and Motor Vehicle in Canada", issued by the Bureau of Statistics. As these first results are considered preliminary, they are not included in the table. The total for 1936 was \$11,363,566, of which \$3,056,209 was for new construction and major improvements.

5.—Capital, Maintenance and General Expenditures on Provincial Highways or Provincially Subsidized Highways in Canada, calendar years 1932-36.

Province.	1932.	1933.	1934.	1935.	1936.
CAPITAL EXPENDITURES.					
	\$	\$	\$	\$	\$
Prince Edward Island.....	278,111	68,254	226,863	998,067	¹
Nova Scotia.....	1,742,887	2,865,306	1,293,410	5,133,188	6,587,411
New Brunswick.....	2,668,576	761,056	1,226,990	3,780,587	5,732,915
Quebec.....	14,551,902	8,587,085	6,555,148	6,466,134	8,033,000
Ontario.....	23,062,693	10,270,065	34,339,626	20,769,357	8,965,720
Manitoba.....	112,348	102,707	215,965	160,724	2,991
Saskatchewan.....	340,527	228,860	1,054,220	468,623	1,506,231
Alberta.....	1,270,096	235,541	1,106,891	2,052,858	1,399,544
British Columbia.....	6,004,369	738,705	125,182	2,619,022	2,739,104 ²
Totals.....	50,031,509	23,854,579	46,144,295	42,438,560	34,966,916⁴

MAINTENANCE EXPENDITURES.

	\$	\$	\$	\$	\$
Prince Edward Island.....	175,473	270,505	315,476	443,542	¹
Nova Scotia.....	1,719,748	1,894,967	1,804,066	1,734,352	1,893,637
New Brunswick.....	904,646	742,394	925,082	1,390,057	714,445
Quebec.....	5,432,742	3,388,343	3,571,805	3,921,273	5,022,914
Ontario.....	8,672,678	5,729,138	7,901,232	7,565,899	5,836,251
Manitoba.....	572,519	397,317	483,806	452,040	420,551
Saskatchewan.....	528,428	1,361,721	1,556,862	1,208,051	1,079,306
Alberta.....	945,249	780,533	798,586	1,164,032	1,154,391
British Columbia.....	2,509,854	2,085,557	1,657,673	3,837,524	4,013,475 ²
Totals.....	21,461,337	16,650,475	19,014,588	21,716,770	20,134,970⁴

PLANT AND GENERAL EXPENDITURES.

	\$	\$	\$	\$	\$
Prince Edward Island.....	13,851		31,095		¹
Nova Scotia.....	50,699		²		5,000
New Brunswick.....	100,238		²		
Quebec.....	675,383		1,401,587		1,679,603
Ontario.....	706,441		866,459		360,529
Manitoba.....	21,914		88,130		88,130
Saskatchewan.....	138,108		135,056		77,234
Alberta.....	17,500		40,938		26,747
British Columbia.....	138,243		184,393		192,849 ²
Totals.....			1,867,377	2,747,658	2,430,092⁴

DOMINION-PROVINCIAL DISTRIBUTION OF ALL EXPENDITURES.

	\$	\$	\$	\$	\$
Dominion—Net expenditures and sub-sidies.....	15,782,625	3,698,705	9,824,691	10,092,310	5,229,410
Provincial—Net expenditures and sub-sidies.....	48,137,903	31,553,347	43,556,087	51,066,944	48,877,721
Municipal—Net expenditures and sub-sidies.....	7,572,318	5,253,002	11,778,105	5,743,734	3,424,847

¹ No report.
on 1935 basis.

² Total expenditures divided between construction, maintenance, and general,
³ None reported.

⁴ Does not include Prince Edward Island.

Provincial Funded Debt Incurred for Highways.—Table 6 shows the funded debts of the provinces incurred for highway development. These amounts should not be confused with estimates of the total investment in highways. The

cost of constructing a new road is considerably greater than that of putting a permanent surface on an old road; the latter has been the purpose of much of the provincial expenditure.

6.—Provincial Government Funded Highway Debt and Annual Charges Thereon, 1934-36.

NOTE.—Provincial Governments report for years ended at various dates. The figures given here are for the reported years approximating most nearly to the calendar year stated.

Province.	Amounts.			Annual Interest and Sinking Funds.		
	1934.	1935.	1936.	1934.	1935.	1936.
	\$	\$	\$	\$	\$	\$
Prince Edward Island.	1,004,774	1,004,774 ¹	1,004,774 ¹	86,000	86,000 ¹	86,000 ¹
Nova Scotia.	34,622,886	30,496,495	33,980,000	1,188,297	1,215,396	1,348,625
New Brunswick.	40,740,876	45,474,355	47,612,809	2,161,925	1,845,855	1,782,787
Quebec.	60,677,000	70,811,283	70,811,283	2,706,840	5,101,007	4,514,084
Ontario.	203,785,482	217,075,787	224,639,350	10,189,274	10,853,789	13,630,543
Manitoba.	17,795,541	17,794,182	17,794,182	905,647	893,293	884,795
Saskatchewan.	29,048,905	33,630,938	33,799,488	1,599,961	1,505,169	1,600,936
Alberta.	34,126,136	35,861,450	37,025,514	1,939,850	2,039,309	1,150,514
British Columbia.	40,380,728	40,141,070	41,297,772	2,076,897	2,047,043	3,378,548
Totals.	462,182,328	492,290,334	507,965,172	22,854,691	25,587,461	28,376,832

¹ 1934 data.

Provincial Government Revenue.—The taxation of motor vehicles, garages, chauffeurs, etc., is becoming a lucrative source of Provincial Government income. In every province the following licences or permits, duly issued by the provincial authorities, are required: motor vehicles of all kinds, trailers (in all provinces except Alberta), operators or drivers, paid chauffeurs, dealers, garages, and gasoline and service stations. A sales tax on gasoline is also levied by each province. The following table shows the provincial revenue for the years 1935 and 1936, indicating, at the same time, the more important sources from which it is derived. Dominion Government revenues from import duties, excise, and sales taxes are not included.

7.—Provincial Revenues from the Taxation of the Distribution and Operation of Motor Vehicles, calendar years 1935 and 1936.

NOTE.—See the headnote to Table 6.

Province.	Passenger Cars.	Trucks.	Motor Cycles.	Dealers' Licences.	Operators and Chauffeurs.	Mileage Tax on Motor Buses and Trucks.	Gasoline Tax.	Total, including Miscellaneous Revenue.
	\$	\$	\$	\$	\$	\$	\$	\$
1935.								
P.E. Island.	81,363	15,987	84	540	3,540	¹	178,687	282,438
Nova Scotia.	621,363	244,926	¹	4,793	86,559	1,427	1,422,542	2,438,987
New Brunswick.	484,987	221,052	¹	3,572	83,032	2,839	1,006,421	1,853,120
Quebec.	2,856,781	1,553,129	9,358	1,100	972,605	22,043	5,666,442	11,219,167
Ontario.	5,231,336	2,470,328	12,018	31,129	758,736	263,676	15,021,994	24,405,547
Manitoba.	612,700	141,410	2,350	8,200	93,900	36,356	1,795,900	2,711,856
Saskatchewan.	986,487	214,023	¹	13,675	58,878	100,798	1,862,300	3,344,666
Alberta.	1,018,136	334,296	1,949	16,770	18,394	167,041	2,048,272	3,614,381
British Columbia.	1,512,606	461,309	8,108	12,967	157,843	21,918	2,530,087	4,750,659
Yukon.	1,310	1,190	27	²	²	²	²	2,802
Totals.	13,407,069	5,657,650	33,894³	92,746	2,233,487	616,098³	31,532,645	54,623,623

¹ None reported.

² Tax not applicable.

³ Incomplete figure, see footnote 1.

7.—Provincial Revenues from the Taxation of the Distribution and Operation of Motor Vehicles, calendar years 1935 and 1936—concluded.

Province.	Passenger Cars.	Trucks.	Motor Cycles.	Dealers' Licences.	Operators and Chauffeurs.	Mileage Tax on Motor Buses and Trucks.	Gasolene Tax.	Total, including Miscellaneous Revenue.
1936.	\$	\$	\$	\$	\$	\$	\$	\$
P.E. Island.....	88,877	16,345	111	490	3,978	235	200,854	312,980
Nova Scotia.....	717,610	362,159	1,862	4,139	101,818	782	1,760,209	3,008,827
New Brunswick...	490,952	289,281	1	4,330	95,783	3,002	1,149,129	2,046,628
Quebec.....	3,037,397	1,718,644	9,492	31,855	996,495	93,270	6,272,064	12,312,957
Ontario.....	6,258,979	2,988,552	13,681	34,348	924,004	270,785	16,049,857	27,194,813
Manitoba.....	624,000	154,600	2,700	1	102,400	43,330	2,051,200	3,024,030
Saskatchewan.....	1,059,180	240,216	1	15,592	63,760	94,097	1,951,834	3,521,871
Alberta.....	1,040,747	498,852	2,104	17,526	136,858	276,952	2,380,088	4,380,004
British Columbia..	1,636,110	536,165	8,854	13,742	177,033	77,239	2,717,201	5,221,059
Yukon.....	1,370	1,460	39	2	2	2	2	3,189
Totals.....	14,955,222	6,806,274	38,843¹	122,022²	2,602,129	859,692	34,532,436	61,026,358

¹ None reported.

² Tax not applicable.

³ Incomplete figure, see footnote 1.

Section 4.—Road Traffic.

Up to the present the motor vehicle has affected passenger traffic more than freight traffic of the steam and electric railways. This diversion of passenger traffic has been effected largely by the private automobile, although the motor bus is rapidly becoming more important and now operates between all large centres. The motor truck also carries a considerable amount of freight, although no statistics showing the tonnage handled are as yet available. The difficulties of collecting statistics from the very large number of unorganized operators concerned are obvious.

Widely differing opinions are held regarding the extent to which the motor vehicle has cut into railway traffic.* A definite conclusion cannot be reached until reliable statistics regarding motor vehicle traffic are available. While undoubtedly the passenger motor vehicle now carries a certain amount of passenger traffic which would otherwise be carried by steam or electric railways, the error should be avoided of considering all the passenger movement by motor vehicles as a loss to the railways. Much of that movement is due to the convenience and cheapness of motor vehicle travel and would not take place at all under less favourable circumstances.

Similar considerations apply also, though less importantly, to freight moved by motor trucks. Part of the short-haul truck traffic has displaced the horse-drawn vehicle rather than the railway. Furthermore, traffic diverted from the railways to motor vehicles has been offset to some extent by new traffic for the railways created by the automobile industry, consisting of raw and finished products of manufacture, motor fuel and oil, and materials for construction and maintenance of roads suitable for motor travel.

On the other hand a phase of this new competition with railway transportation has been its effect on freight rates. The railway rate structure took into consideration the value of the goods handled, *i.e.*, bulk and low-value commodities were carried at relatively low rates, while manufactured and high-class commodities were at higher rates, the difference in rates having little relation to the difference in costs of transportation. Such a structure allowed raw materials to be moved

* Counsel for the railways before the Transport Committee of the Senate of Canada presented arguments showing a serious loss of revenue by the railways from motor vehicle competition. On the other hand, in *Automobile Facts and Figures*, 1936, published by the Automobile Manufacturers' Association, estimates of railway and motor traffic are given which, in the field of freight movement, rather minimize the seriousness of the motor truck competition, if conditions of motor traffic in Canada may be assumed to be similar to those of the United States.

cheaply and the railways were compensated by higher rates on the finished commodities. The motor truck is changing this; the motor truck operator carries these high-class commodities at rates closer to actual costs and does not attempt to carry raw materials except in special cases. His costs are reduced by a right-of-way being supplied for which he pays only a part of the cost and, if his rates are much above the actual cost, the manufacturer can quite easily supply his own transportation. Some branch lines of the railways are practically deserted except for a short time each year when snow interferes with motor vehicle operation. Consequently, railway losses include both losses from freight diverted and also from reductions in rates for high-class freight in attempts to retain such traffic without compensating increases in low-class freight rates.

Gasolene Consumption.—All provinces require retail sales of gasolene to be reported and a tax is imposed on all gasolene consumed by motor vehicles using the highways and streets and also on that used for an increasing number of other purposes. The taxable gasolene is, however, still largely consumed by motor vehicles and indicates in a general way the increase or decrease in the use of motor vehicles. Net sales are the differences between the total or gross sales reported and the quantities on which the tax is refunded in whole or in part, or on which the tax is not imposed at the time of sale.

8.—Sales of Gasolene in Canada, by Provinces, calendar years 1932-36.

Province.	1932.	1933.	1934.	1935.	1936.
	gal.	gal.	gal.	gal.	gal.
Prince Edward Island.....	2,692,351	2,518,812	2,639,856	2,832,750	3,088,910
Nova Scotia.....	19,021,209	18,634,875	20,016,109	22,274,254	25,247,957
New Brunswick.....	13,671,394	12,574,097	13,640,325	15,185,003	17,477,029
Quebec.....	91,128,040	87,077,418	93,511,483	102,177,506	109,835,482
Ontario.....	233,945,231	228,415,717	252,976,407	272,680,687	282,827,724
Manitoba.....	26,185,160	24,895,531	27,694,263	28,482,662	30,581,967
Saskatchewan.....	33,685,929	31,837,173	36,784,519	39,166,282	45,966,233
Alberta.....	41,300,236	40,323,781	45,194,297	47,442,690	60,387,814
British Columbia.....	39,458,159	38,689,475	42,337,785	43,410,411	48,731,688
Totals, Gross Sales...	501,037,709	484,966,879	534,795,044	573,652,245	624,144,804
Refunds.....	62,281,861	63,244,154	57,868,513	73,214,746	91,260,543
Totals, Net Sales.....	438,755,848	421,722,725	476,926,531	500,437,499	532,884,261

Motor Vehicle Accidents.—Motorists are required to report accidents but comprehensive statistics are not available for all provinces. The Vital Statistics Branch of the Bureau of Statistics compiles statistics on all deaths from motor vehicle accidents and these are shown in Table 9. A direct comparison of such statistics between the provinces is of little value due to differences in size, population, motor vehicle density, etc., but, to put them on somewhat the same basis, the average number of deaths per 10,000 registered motor vehicles has also been tabulated. Although this treatment puts the data on a better footing than the absolute figures, it still gives no weight to differences in use of motor vehicles, differences in climate, roads, tourist cars, etc., all of which are factors in accidents.

Table 10 shows the numbers of persons killed or injured in automobile accidents as reported by the motor vehicle branches of the Provincial Governments. It is quite possible that the latter reported some persons as injured who subsequently died from the injuries and these would be included in the fatalities of the vital statistics shown in Table 9; also accidents might occur late in December and resulting deaths might be charged to December by the provincial authorities but to January of the next year in the vital statistics. Consequently, these data do not agree.

9.—Deaths Resulting from Motor Vehicle Accidents in Canada, by Provinces, calendar years 1926-36.

NOTE.—Statistics in this table are compiled by the Vital Statistics Branch, Dominion Bureau of Statistics.

Year.	P.E. Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.
NUMBERS OF DEATHS.										
1926.....	1	28	11	183	242	27	21	33	60	606
1927.....	2	31	25	252	387	32	24	35	77	865
1928.....	2	40	31	279	437	53	74	75	91	1,082
1929.....	1	61	47	323	556	68	56	71	117	1,300
1930.....	10	54	72	338	517	60	51	77	111	1,290
1931.....	5	49	45	355	574	60	50	67	111	1,316
1932.....	1	51	49	311	497	42	35	49	85	1,120
1933.....	2	47	22	256	416	38	32	64	78	955
1934.....	5	41	52	275	528	41	30	61	82	1,115
1935.....	2	57	40	314	571	53	40	45	102	1,224
1936 ¹	7	58	41	371	563	53	47	72	101	1,313

DEATHS PER 10,000 REGISTERED MOTOR VEHICLES.

1926.....	2.89	10.82	5.11	16.89	6.23	4.67	2.16	5.03	8.82	7.23
1927.....	4.56	10.31	10.19	19.62	8.87	5.01	2.25	4.74	9.92	9.15
1928.....	3.68	11.39	11.00	18.79	8.90	7.45	6.08	8.40	10.25	10.05
1929.....	1.63	15.30	14.76	19.05	10.12	8.74	4.30	7.12	11.23	10.82
1930.....	13.51	12.54	20.67	18.89	9.16	7.57	3.93	7.50	11.22	10.40
1931.....	6.46	11.20	13.38	19.77	10.21	7.94	4.61	7.00	11.33	10.96
1932.....	1.43	12.39	17.47	18.77	9.35	5.87	3.83	5.64	9.34	10.05
1933.....	2.88	11.62	8.20	16.00	8.00	5.53	3.78	7.43	8.81	8.82
1934.....	6.94	9.78	17.87	16.62	9.74	5.82	3.28	6.83	8.91	9.82
1935.....	2.43	12.97	12.81	18.40	10.12	7.50	4.21	4.79	10.47	10.42
1936 ¹	9.17	12.56	12.27	20.43	9.54	7.07	4.60	7.39	9.52	10.59

¹ Preliminary figures.

10.—Persons Killed or Injured in Motor Vehicle Accidents, as Reported by Provincial Motor Vehicle Authorities, showing Status of Person, 1936.

Item.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask. ¹	Alta.	B.C.	Total.
Accidents.										
Fatal—										
Resulting in death of one or more persons.....	6	—	—	—	501	53	35	46	91	
Non-fatal—										
Resulting in injury to one or more persons.....	174	—	—	—	7,803	1,312	439	612	1,815	—
Resulting in property damage only.....	2	—	—	—	3,084	2	410	3,285	2,383	—
Totals, Accidents...	180²	2,306⁴	669⁴	4,095⁴	11,388	1,365³	884	3,943	4,289	29,119⁵
Persons Killed.										
Pedestrians.....	1	25	—	170	244	14	7	17	32	510
Motor cyclists (drivers and passengers).....	Nil	1	—	—	11	3	Nil	1	7	
Drivers of other motor vehicles.....	Nil	4	—	139	97	29	12	18	24	593
Passengers and attendants of other motor vehicles....	3	21	—	—	156	—	19	14	34	
Occupants of horse-drawn vehicles.....	2	1	—	7	7	2	Nil	Nil	3	22
Pedal cyclists.....	1	2	—	—	30	5	3	2	2	
Others.....	Nil	Nil	—	42	1	1	Nil	5	Nil	94
Totals, Persons Killed.....	7	54	38⁴	358	546	54	41	57	102	1,257⁶

For footnotes see end of table, p.680.

10.—Persons Killed or Injured in Motor Vehicle Accidents, as Reported by Provincial Motor Vehicle Authorities, showing Status of Persons, 1936—concluded.

Item.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask. ¹	Alta.	B.C.	Total.
Persons Injured.										
Pedestrians.....	2	—	2	2,226	3,362	605	73	172	535	6,973
Motor cyclists (drivers and passengers).....	2	—	67		212	36	7	18	104	
Drivers of other motor vehicles.....	2	—	2	2,704	1,815	755	266	376	1,038	11,656
Passengers and attendants of other motor vehicles.....	2	—	300		3,633		325			
Occupants of horse-drawn vehicles.....	2	—	2	174	175	47	37	12	15	460
Pedal cyclists.....	2	—	2	1,106	192	24	73	256		2,830
Others.....	2	—	2	582	7	10	3	Nil	577	
Totals, Persons Injured.....	2	1,288⁴	367³	5,686	10,310	1,645	735	651	2,525	23,207⁵

¹ For the period Mar. 1 to Dec. 31, 1936.
See footnote 2.

⁴ Not distributed.

² Not reported.

³ This figure is incomplete.
⁵ This figure is incomplete. See previous footnotes.

PART IV.—WATERWAYS.*

Under this heading the statistics relating to shipping, aids to navigations, canals, and harbours are brought together because they are all essential and integral parts of the facilities for water-borne traffic; these facilities work together to promote the expeditious handling of the same freight without transshipment intervening. Under this form of treatment all the facilities for water-borne traffic are first presented, then the cost of other available financial statistics and, finally, figures which give some indication of the traffic handled. The general aim is to present a rounded picture of water transportation, rather than details of the activities of Government Departments dealing with certain phases of it. Legislation regarding all phases of shipping has now been consolidated under the Canada Shipping Act.

The Canada Shipping Act.—The Parliament of Canada, since the passage of the Statute of Westminster in 1931, has exercised full responsibility for the regulation of Canadian shipping. Previously certain phases of Canadian shipping business were regulated by the provisions of the Imperial Merchant Shipping Acts. The Parliament of Canada may now repeal sections of the Imperial Statutes, so far as they relate to Canada, if it so desires, and re-enact their provisions or substitute other provisions in lieu thereof.

The shipping legislation of Canada was remodelled in 1934 by the Canada Shipping Act, c. 44 of the Statutes of that year, and was brought more into conformity with present developments. The Act incorporates important provisions of certain international conventions including the Safety of Life at Sea Convention; the Load Line Convention; the International Convention Concerning Seamen's Articles of Agreement; and the International Convention Concerning Repatriation of Seamen. This comprehensive piece of legislation was, in fact, the incorporation into the shipping law of Canada of features of International, British, and previous

* Information and statistics dealing with the indicated subject have been supplied as follows: aids to navigation, harbours, administrative services, and Government merchant marine, by the Department of Transport; shipping, by the Department of National Revenue; graving docks and part of the financial statistics, by the Department of Public Works; Panama Canal, by the Governor of the Panama Canal Zone; and other canal traffic, by the Transportation and Public Utilities Branch, Dominion Bureau of Statistics.

Canadian legislation which now properly come under Dominion authority, and is framed so as to be in conformity with similar Acts of the Imperial Parliament and other Dominions.

The Act is administered by the Minister of Marine (except as regards Part V, which governs the health and hospitalization of mariners) and deals in 16 parts with the regulations of coasting and inland, as well as ocean, shipping.

Part I deals with the conditions governing the recording and the registering of vessels.

Part II of the Act deals in detail with the proper certification of masters, mates, and engineers of all except certain smaller vessels.

Part III is concerned with the engagement and discharge of seamen and the facilities to be provided by shipping masters for this purpose, as well as for the making of apprenticeships to the sea service. The payment of wages to seamen, and the rights of seamen in respect thereto, are dealt with in Secs. 184-214. The remainder of this Part is concerned with various protective measures for the employment and welfare of seamen.

Part IV lays down provisions for the relief and repatriation of distressed seamen.

Part V governs the treatment of sick mariners and the establishment of marine hospitals. This Part of the Act is to be administered by the Minister named by the Governor in Council.

Part VI treats of pilotage, defines the pilotage districts and allows for the constitution of pilotage authorities and the creation of new districts. The duties and powers of pilotage authorities are laid down and the requirements with regard to the payment of pilotage dues.

Part VII has reference to the safety of shipping, which is ensured through a properly appointed and competent steamship inspection service. Penalties are provided against the overloading of passenger ships, safety precautions are laid down, and the installation of radio equipment made compulsory on all passenger ships and other ships of 1,600 tons gross and upwards registered in Canada. Regulations governing the inspection of radiotelegraph apparatus and the qualification of radio operators are described. Elaborate provisions are made regarding load lines and loading as these matters refer to different classes of ships registered in Canada or not registered in Canada.

Part VIII treats of wrecks, salvage and investigations into shipping casualties. An official Receiver of Wrecks, or, in his absence, the Chief Officer of Customs, or the agent of the Department of Marine, shall have power to take command of a wreck in his district and assign duties to each and all persons present, for the preservation of the vessel and lives of shipwrecked persons. Important further powers of Receivers of Wrecks are also enumerated. All wrecks (including aircraft) shall be delivered to the Receiver as soon as possible by any person taking possession. Conditions governing disposition of wrecks, of procedure in salvage and inquiries into casualties are laid down.

Part IX deals with safeguards to navigation—lighthouses, buoys, beacons—and the government of Sable island.

Parts X and XI govern the creation and extension of Public Harbours, the appointment of Harbour Masters and Port Wardens.

Part XII lays down the rules, regulations and orders regarding collisions and limitation of liability of owners.

Parts XIII–XVI are taken up with matters pertaining to the coasting trade, delivery of goods, legal proceedings, etc.

Appended to the Act are twelve schedules, the first six set out the text of certain international conventions which have been incorporated to a large extent in the Act and which are referred to in the definition section and in other sections of the Act. The other schedules are forms which are used in connection with the administration of the Act.

Section 1.—Equipment and Facilities.

The developments and equipment to facilitate water traffic are classified under the sub-headings of shipping, aids to navigation and miscellaneous works, canals, and harbours. A subsection is added giving figures of administrative activities regarding the pilotage service, steamship inspection, personnel, and accidents to shipping.

Subsection 1.—Shipping.

Although a large part of the water-borne traffic, especially inland and coast-wise, is carried in ships of Canadian registry, the commerce of the Dominion is by no means entirely dependent upon Canadian shipping since all waterways, including canals, and inland lakes and rivers, are open upon equal terms, except in the case of the coasting trade, to the shipping of all countries of the world.

Canadian Registry.—Statistics are given below showing the numbers and tonnages of vessels on the Registry of Shipping of Canada, and of vessels built in Canada and vessels sold to other countries. As is found by reference to Part I of the Canada Shipping Act, every ship that falls under the definition of 'British ship' given in Sec. 6 of the Act and is controlled, as to management and use, in Canada, must, unless registered elsewhere in the Empire, be registered in Canada. An exception is made in the case of ships not exceeding 10 tons register and engaged solely in coastal or inland navigation. A ship (whatever her qualification for British registry) which is not registered in any part of His Majesty's dominions, is not entitled to the privileges accorded to British ships. Vessels about to be built *may* be recorded, and vessels being built or equipped *must* be recorded, by a registrar of British ships under the Act. The procedure for the registration in Canada of British ships and the issuance of certificates is covered in Secs. 9-36. Secs. 64-70 govern the registry of alterations (or the registering anew if such be required) and lay down penalties for non-compliance with the requirements. The conditions governing transfer of registry are also laid down.

For a record of the number and tonnage of ships engaged in the carrying trade of Canada, see the tables under Section 3 (pp. 698-702) of this Part of the chapter. The tables are included there under traffic statistics because they relate more directly to traffic and services than merely to the shipping available. For an account of the shipping services operated by the Dominion Government, see p. 696.

1.—Numbers and Net Tonnages of Vessels on the Registry of Shipping of Canada, by Provinces, Dec. 31, 1927-36.

NOTE.—The figures in this table are supplied by the Department of Transport.

Province.	1927.		1928.		1929.		1930.		1931.	
	No.	Tonnage	No.	Tonnage	No.	Tonnage	No.	Tonnage	No.	Tonnage
P.E. Island.....	133	8,581	132	8,549	134	8,370	130	8,351	129	10,996
Nova Scotia.....	1,412	129,482	1,436	126,428	1,471	127,077	1,478	119,055	1,434	112,891
New Brunswick..	829	33,077	828	33,395	885	34,031	919	38,350	983	39,766
Quebec.....	1,368	456,092	1,373	502,224	1,265	506,594	1,262	495,017	1,277	506,787
Ontario.....	1,724	397,987	1,746	367,007	1,759	365,531	1,775	392,708	1,771	378,925
Manitoba.....	96	10,661	98	10,684	103	11,051	105	11,185	110	11,461
Saskatchewan....	6	486	6	486	6	486	6	486	6	486
British Columbia	2,872	327,984	3,012	313,651	3,257	335,810	3,203	361,328	3,178	361,305
Yukon.....	14	3,650	14	3,650	19	4,543	20	5,584	17	5,031
Totals.....	8,454	1,368,000	8,645	1,366,074	8,899	1,393,493	8,898	1,432,064	8,905	1,427,648

Province.	1932.		1933.		1934.		1935.		1936.	
	No.	Tonnage	No.	Tonnage	No.	Tonnage	No.	Tonnage	No.	Tonnage
P.E. Island.....	134	11,124	135	11,067	140	11,060	140	11,077	143	11,248
Nova Scotia.....	1,400	113,352	1,379	105,737	1,391	99,860	1,434	99,115	1,513	94,654
New Brunswick..	983	39,293	1,010	41,247	1,061	43,911	1,025	42,530	1,003	44,447
Quebec.....	1,321	509,634	1,320	482,579	1,291	463,591	1,312	460,313	1,393	457,229
Ontario.....	1,761	422,336	1,857	419,828	1,772	418,167	1,777	421,203	1,773	420,211
Manitoba.....	112	11,485	113	11,505	114	11,943	87	8,157	131	8,169
Saskatchewan....	6	486	5	397	5	397	5	397	5	397
British Columbia	3,161	362,407	3,084	352,187	3,086	341,650	3,096	341,372	3,394	325,537
Yukon.....	17	5,031	17	5,031	17	5,074	18	5,179	18	5,179
Totals.....	8,895	1,475,148	8,920	1,429,578	8,877	1,395,653	8,894	1,389,343	9,373	1,367,071

2.—Vessels Built and Registered in Canada and Vessels Sold to Other Countries, fiscal years ended Mar. 31, 1927-37.

NOTE.—For 1874-1900, see Canada Year Book, 1911, p. 383; for 1901-10, see 1932 Year Book, p. 597; and for the years 1911-26, see p. 718 of the 1936 Year Book. Statistics are from the Shipping Reports of the Department of National Revenue.

Fiscal Year.	Built.		Registered.		Sold to other Countries.		
	No.	Tonnage	No.	Tonnage	No.	Tonnage	Value.
1927.....	341	32,801	281	79,448	32	27,027	\$ 1,984,040
1928.....	236	12,904	417	64,301	31	16,307	599,490
1929.....	328	49,798	386	155,972	30	18,627	154,750
1930.....	282	28,871	468	84,529	34	33,779	805,636
1931.....	294	45,162	396	129,088	22	8,865	421,500
1932.....	202	19,032	319	64,396	23	18,849	889,221
1933.....	159	9,156	193	25,811	32	37,543	443,258
1934.....	113	5,818	184	10,375	22	13,570	147,850
1935.....	141	4,306	165	12,985	18	23,613	374,345
1936.....	205	11,388	285	35,732	22	7,170	230,735
1937.....	213	10,423	294	29,801	23	15,595	342,975

Subsection 2.—Aids to Navigation and Miscellaneous Works.

Included under this heading are the lighthouses and the whole system of marine danger signals on the east and west coasts of Canada, on Hudson bay and strait, the St. Lawrence river and gulf, the inland rivers and lakes and at the entrances to harbours—a very extensive system designed to provide safe navigation in all Canadian waters. In addition, a pilotage service is maintained in waters where navigation is difficult; this service is described under administrative services on p. 688. As a further aid to safe navigation, there are chains of radio signal and direction-finding stations which are described under that section of this chapter dealing with radiotelegraphy, on pp. 727-729.

3.—Comparative Statement of Marine Danger Signals, fiscal years ended Mar. 31, 1926-37.

NOTE.—In addition to the aids to navigation listed in the following table, approximately 9,268 unlighted buoys, balises, dolphins, and beacons are maintained. The figures are supplied by the Department of Transport.

Description.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Lights.....	1,675	1,725	1,771	1,815	1,855	1,912	1,923	1,922	1,924	1,920	1,938	1,959
Lightships.....	10	11	11	11	11	11	11	11	11	12	12	11
Light-keepers.....	1,143	1,156	1,179	1,192	1,207	1,227	1,230	1,230	1,226	1,223	1,223	1,227
Fog whistles.....	8	8	6	8	8	8	8	8	8	8	8	8
Sirens.....	1	2	2	2	2	2	2	2	2	2	2	2
Diaphones.....	146	147	153	158	162	165	170	171	171	170	169	168
Fog bells.....	36	35	36	38	38	38	38	38	38	38	38	37
Hand fog horns.....	148	148	151	147	151	152	153	154	154	155	158	158
Hand fog bells.....	4	5	4	4	4	4	4	4	4	4	4	4
Gas, whistling and bell buoys.....	374	380	401	411	425	429	436	444	440	438	441	445
Whistling buoys.....	34	36	38	40	40	40	42	42	41	41	41	41
Bell buoys.....	99	101	104	111	119	119	119	122	122	122	124	126
Submarine bells.....	6	6	6	4	4	4	3	2	2	2	2	2
Fog guns and bombs....	6	6	6	5	5	5	5	5	5	4	6	9
Fog alarm stations only.	13	13	13	13	13	13	13	13	13	13	13	13

A great deal has been done to improve navigable waters by dredging in channels and harbours, by the removal of obstructions, and by the building of remedial works to maintain or control water levels. Probably the largest task of this nature has been the St. Lawrence River Ship Channel. An extensive floating plant is in service to maintain and improve the deep-water channel from Montreal to the sea for ocean-going shipping. Incidental to these developments of navigable waters are works to guard shore lines and prevent erosion, and also the control of roads and bridges which cross navigable channels. In order to prolong the season of navigation in important waters which freeze over in winter, ice-breaking operations are carried on at both the beginning and end of winter. This is particularly the case in connection with sea-going shipping from Montreal.

4.—Duration of the Season of Open Navigation in the St. Lawrence Ship Channel, calendar years 1911-37.

NOTE.—For the years 1882-1910, see Canada Year Book, 1934-35, p. 756.

Calendar Year.	Channel Open, Quebec to Montreal. ¹	First Arrival from Sea, Montreal Harbour.	Last Departure for Sea, Montreal Harbour.	Calendar Year.	Channel Open, Quebec to Montreal. ¹	First Arrival from Sea, Montreal Harbour.	Last Departure for Sea, Montreal Harbour.
1911.....	Apr. 25	Apr. 26	Dec. 3	1924.....	Apr. 17	Apr. 24	Dec. 3
1912.....	" 29	" 30	" 3	1925.....	" 10	" 22	" 9
1913.....	" 14	" 19	Nov. 29	1926.....	May * 1	May 3	" 6
1914.....	" 25	" 29	Dec. 4	1927.....	Apr. 11	Apr. 12	" 6
1915.....	" 14	" 30	" 11	1928.....	" 26	" 26	" 9
1916.....	" 22	May 1	" 3	1929.....	" 10	" 20	" 7
1917.....	" 22	" 1	" 7	1930.....	" 12	" 21	" 12
1918.....	" 22	" 7	" 14	1931.....	Mar. 19	" 15	" 11
1919.....	" 16	Apr. 22	" 10	1932.....	" 27	" 14	" 8
1920.....	" 18	" 25	" 7	1933.....	" 23	" 14	" 6
1921.....	Mar. 29	" 21	" 8	1934.....	" 28	" 26	" 8
1922.....	Apr. 13	" 24	" 2	1935.....	" 30	" 15	" 9
1923.....	" 29	May 3	" 2	1936.....	" 28	" 13	" 11
				1937.....	Apr. 9	" 19	" 8

¹ "Channel open" means it can be navigated although there may be floating ice still in the river.

Subsection 3.—Canals.

Before the period of extensive railway construction which commenced for Canada in the 1850's, the water routes, more especially the St. Lawrence, the Great Lakes and the Ottawa, were the chief avenues of transportation. These routes were interrupted at certain points, necessitating portages, and to eliminate the toil of unloading, transporting and reloading at the portages the canals of Canada were constructed.

The earliest mention of canals in Canada is in connection with the Lachine canal, begun by early French settlers in 1700, but only after the conquest of Canada by the British were improvements of the main water routes made, and in the early part of the 19th century increased internal and foreign trade and the introduction of steam navigation resulted in more attention being given to this work. Although some of the early canals were constructed primarily for military purposes they soon became essential to the commercial life of the country. However, since the development of railways in Canada, and even more since the growth of motor vehicle traffic, the canals, with the exception of those on the Great Lakes and St. Lawrence river, are playing a minor part in the transportation activities of the country.

There are in Canada six canal systems, under the control of the Dominion Department of Transport, which are connected with the Atlantic ocean by navigable routes, in addition to a number of other minor locks and canals, under the control of the Dominion Department of Public Works or other authority, to facilitate local navigation on disconnected lakes and rivers. The six main systems consist of the canals: (1) between Port Arthur or Fort William and Montreal; (2) from Montreal to the International Boundary near lake Champlain; (3) from Montreal to Ottawa; (4) from Ottawa to Kingston and Perth; (5) from Trenton, lake Ontario, to lake Huron (not completed); and (6) from the Atlantic ocean to Bras d'Or lakes, Cape Breton. By means of these canals, total waterways of 1,890 miles have been opened to navigation, the actual mileage of canals being 508·67.

A detailed description of the individual canals was given on pp. 626-629 of the 1926 Year Book. Summary statistics of their length and lock dimensions are given in Table 5.

5.—Canals of Canada, Length and Lock Dimensions, 1938.

Name.	Location.	Length of Canal.	Locks.			
			No.	Minimum Dimensions.		
				Length.	Width.	Depth.
		miles.		ft.	ft.	ft.
St. Lawrence—						
Lachine.....	Montreal to Lachine.....	8.74	5	270	45	14 ¹
Soulanges.....	Cascades Point to Coteau Landing.	14.67	5	280	46	15 ¹
Cornwall.....	Cornwall to Dickinson's Landing...	11.00	6	270	43-67	14 ¹
Farran's.....	Farran's Point rapids.....	1.23	1	300	50	16 ¹
Rapide Plat.....	Rapide Plat to Morrisburg.....	3.89	2	270	45	14 ¹
Galops.....	Iroquois to Cardinal.....	7.36	3	270	45	14 ¹
Welland Ship.....	Port Weller, lake Ontario, to Port Colborne, lake Erie.....	27.60	8	859	80	30 ²
Sault Ste. Marie.....	St. Mary's rapids, 47 miles west of lake Huron.....	1.38	1	900	60	18-25 ¹
Richelieu River—						
St. Ours lock.....	St. Ours, Que.....	0.12	1	339	45	12 ¹
Chambly.....	Chambly to St. Johns, Que.....	11.78	9	120-5	23-25	6-5
Ottawa and Rideau Rivers—						
Ste. Anne lock.....	Junction of St. Lawrence and Ottawa rivers.....	0.12	1	200	45	9
Carillon.....	Carillon rapids, Ottawa river.....	0.94	2	200	45	9
Grenville.....	Long Sault rapids, Ottawa river....	5.94	5	200	45	9-5
Rideau.....	Ottawa to Kingston.....	126-25	47	134	33	5
	Rideau lake to Perth (Tay branch)	6-50	2	134	33	5
Miscellaneous—						
Trent.....	Trenton to Peterborough lock,					
	Peterborough.....	88.74	18	175	33	6
	Peterborough lock to Swift rapids..	135-71	24	134	33	6
	Swift rapids to Port Severn.....	16.00	(marine railways)			4 ³
	Port Severn lock.....	—	1	100	25	6
	Sturgeon lake to Lindsay (Scugog branch).....	8-35	1	142	33	6
	Lindsay to Port Perry (Scugog branch).....	26-65 ⁴	Nil	—	—	—
Murray.....	Isthmus of Murray—bay of Quinte.	5-15 ⁴	Nil	—	—	—
St. Peters.....	St. Peters bay to Bras d'Or lakes, Cape Breton, N.S.....	0.50	1	300	48	18 ⁵

¹ Navigable depths are occasionally less at times of extremely low water.

² Minimum depth between locks 25 feet.

³ Minimum depth of navigable channels is 4.5 ft.

⁴ Minimum depth of canal with lake Ontario at elevation 244 feet above sea-level is 11 ft.

⁵ The depth of canal prism is 17 feet.

⁶ Minimum depth

Subsection 4.—Harbours.

Water transportation cannot be studied with any degree of completeness without taking into consideration the co-ordination of land and water transportation at many of the seaboard and inland ports. Much equipment designed to facilitate interchange movements is provided by the harbours. This harbour equipment includes the necessary docks and wharves, some for passenger traffic but most of them for freight, warehouses for the handling of general cargo, and special equipment for such bulk freight as lumber, coal, oil, grain, etc. Equipment may include cold storage, harbour railway and switching connections, grain elevators, coal bunkers, oil storage tanks, and, in the main harbours, dry-dock accommodation.

Eight of the principal harbours of Canada are under the administration of the National Harbours Board, as explained below. Some other harbours are administered by commissions which include municipal as well as Dominion Government appointees, while the remainder are administered by harbour masters directly under the authority of the Department of Transport.

In addition to the harbour facilities owned by the National Harbours Board or other operating commission, at most ports there are dock and handling facilities owned by private companies such as railways, pulp and paper, oil, and sugar industries, etc. At a number of ports there are also graving docks which are dealt with separately below.

It is not possible at present to compile comparable representative statistics regarding the equipment of the leading ports of Canada but with the consolidation of control under the Department of Transport, such statistics should be available in the near future.

National Harbours Board.—Prior to October, 1935, the seven national harbours of Canada—Halifax, Saint John, Chicoutimi, Quebec, Three Rivers, Montreal, and Vancouver—were under the management and control of separate Harbour Commissions, each consisting of three persons appointed from the immediate locality. Orders in Council were passed on Oct. 31, 1935, accepting the resignations of the individual Harbour Commissions, and other Orders in Council passed as of the same date vesting in a single Board of three Harbour Commissioners the powers and responsibilities inherent in each of the seven former commissions. In this way effect was given to the more important recommendations of Sir Alexander Gibb, following his survey of national ports in 1931.

During the 1936 session of Parliament, the individual Acts relating to the administration of these ports were repealed and a single uniform Act (c. 42) substituted, placing the general direction and control of the national ports referred to under a single National Harbours Board, leaving the local administration in the hands of a port manager responsible to the Board. This legislation became effective on Oct. 1, 1936. An Order in Council was passed Feb. 27, 1937, transferring Churchill harbour (including the grain elevator) as well as grain elevators at Prescott and Port Colborne, to the National Harbours Board for administration, management and control.

The headquarters of the National Harbours Board is at Ottawa, and, under the Minister of Transport, the Board is now responsible for the administration, maintenance, and control of the eight ports and two grain elevators referred to, as well as any other harbour property which the Governor in Council may transfer to the Board for administration. Engineering works, heretofore under the direction of small local staffs, are now looked after by the departmental engineering services, while local direction devolves upon competent port managers with a proper background of experience. The financial control of each port is under the direction of the Comptroller of the Treasury and subject to audit by the Auditor General of Canada. Accounting for each port is, however, to be carried out at the port, and funds earned at one port will not be diverted for use elsewhere.

Public Harbours and Harbour Masters.—In the smaller ports, the Governor in Council, as formerly, may create public harbours by proclamation, as provided by Part X of the Canada Shipping Act (c. 44, 1934), and the Minister of Transport may, from time to time, appoint harbour masters for these smaller ports, who will administer the same under rules and regulations approved by the Governor in Council. Remuneration of these harbour masters will be from fees levied on vessels under the terms of the Act.

Graving Docks.—The Department of Public Works of the Dominion Government has constructed five dry docks, which are shown in Table 6. The dock at Kingston, Ont., is under lease to the Kingston Shipbuilding Company, while the

old Esquimalt Dry Dock was temporarily transferred to the Department of National Defence on Nov. 1, 1934. This transfer is to be effective until such time as the dock is commercially required, when it will be returned to the control of the Department of Public Works. The large dry docks at Lauzon, Que., and Esquimalt, B.C., can be divided into two parts and were built at a cost of approximately \$3,850,000 each. Under the Dry Dock Subsidies Act, 1910 (9-10 Edw. VII, c. 17), several docks have been subsidized by payments of 3 to 4 p.c. per annum on the original cost for a given number of years, as shown in Table 7.

6.—Dimensions of Graving Docks Owned by the Dominion Government.

Location.	Length.	Width at—			Depth of Water on Sill.	Rise of Tide.	
		Coping.	Bottom.	Entrance.		Spring.	Neap.
	ft.	ft.	ft.	ft.	ft.	ft.	ft.
Lauzon, Que. <i>Champlain</i>	1,150	144	105	120	40-0 H.W.	18	13-3
Lauzon, Que. <i>Lorne</i>	600-3	100	59-5	62	25-8 H.W.	18	13-3
Esquimalt, B.C. (old dock).....	450-7	90	41	65	29-0 H.W.	7 to 10	3 to 8
Esquimalt, B.C.....	1,173	149	126	135	40-0 H.W.	7 to 10	3 to 8
Kingston, Ont.....	353-5	79	47	55	16-0	—	—

7.—Dimensions and Cost of Graving Docks Subsidized under the Dry Dock Subsidies Act, 1910.

Location.	Length.	Width.	Depth over Sill.	Total Cost.	Subsidy.
	ft.	ft.	ft.	\$	
Collingwood No. 1, Ont. ¹	515-8	59-8	14-8	500,000	3 p.c. for 20 years.
Collingwood No. 2, Ont. ¹	413-2	95	19-2	306,965	3 p.c. for 20 years.
Port Arthur, Ont.....	708-3	77-6	16-2	1,258,050	3 p.c. for 20 years.
Montreal, Que. (floating dock), <i>Duke of Connaught</i>	601	100	31-5	3,000,000	3½ p.c. for 35 years.
Prince Rupert, B.C. (floating dock).....	600	100	32	2,199,168	3½ p.c. for 35 years.
Saint John, N.B.....	1,164-5	133	40	5,500,000	4½ p.c. for 35 years.
North Vancouver, B.C. (floating dock).....	556-5	98	28	2,500,000	4½ p.c. for 35 years.

¹ Subsidy payments on these two dry docks have been completed.

Subsection 5.—Government Administrative Services.

The services covered by this subsection are those dealing with the pilotage service, steamship inspection, sea-faring personnel, and accidents to shipping.

Pilotage.—This service functions under the provisions set forth in Part VI of the Canada Shipping Act (c. 44, 1934). The necessity for pilots is that qualified men may offer their services to the stranger in local and confined waters. At the same time, pilotage might also be considered as a method of insurance—the fewer accidents, the cheaper insurance rates will be.

There are 40 pilotage districts in Canada, eight of which, namely, Sydney, Halifax, Saint John, Quebec, Montreal, St. Lawrence-Kingston-Ottawa, British Columbia, and Churchill, are under the Minister of Transport as Pilotage Authority. The Pilotage District of New Westminster, B.C., is under a local authority. The other districts function under local Pilotage Authorities appointed by the Governor in Council under the provisions of the Canada Shipping Act (see p. 681).

The following statement shows the number and aggregate tonnage of ships using pilots for our major Canadian ports during the year ended Mar. 31, 1937. Corresponding statistics are not available for the St. Lawrence-Kingston-Ottawa District.

DETAILS OF PILOTAGE, BY DISTRICTS, FISCAL YEAR ENDED MAR. 31, 1937.

District.	Pilots.	Ships Piloted in and out.	Net Tonnage.
	No.	No.	
Sydney.....	15	2,238	2,566,588
Halifax.....	21	2,185	7,340,044
Saint John.....	12	860	2,626,362
Quebec.....	58	3,888	13,996,541
Montreal.....	77	5,757	14,553,619
Churchill.....	2	30	91,110
British Columbia.....	35	3,953	15,594,831
New Westminster.....	7	502	1,759,798

Steamboat Inspection.—The Steamboat Inspection Service of Canada, maintained under the authority of the Department of Transport, comprises the Board of Steamboat Inspection, together with staffs of inspectors at the principal ocean and inland ports. The Board decides on the standards required of all vessels coming under its jurisdiction. These must be attained by all ships given official warrant as to their seaworthiness and mechanical condition. Regulations for the issue of safety certificates under the International Convention for the Safety of Life at Sea were approved by Order in Council of Oct. 18, 1934, and are now being administered by the Board.

The Board is also responsible for the examinations for competency of marine engineers, and grants certificates of competency to successful candidates.

8.—Steamboat Inspection, by Inspection Divisions, fiscal years ended Mar. 31, 1936 and 1937.

Year and Division.	Vessels Inspected.				Vessels Not Inspected.	
	Vessels Registered or Owned in the Dominion.		Vessels Registered or Owned Elsewhere.			
	No.	gross tonnage.	No.	gross tonnage.	No.	gross tonnage.
1936.						
Halifax.....	104	130,042	16	71,131	Nil	-
Saint John.....	53	39,258	2	11,228	53	44,142
Quebec.....	61	41,820	Nil	-	11	3,802
Sorel.....	82	48,543	Nil	-	40	19,134
Montreal.....	136	111,261	Nil	-	69	19,004
Kingston.....	88	99,324	7	438	21	24,823
Toronto.....	222	357,995	36	52,316	20	21,386
Midland.....	87	46,238	1	39	36	26,630
Collingwood ¹	28	13,366	2	3,569	Nil	-
Port Arthur.....	85	67,926	Nil	-	57	2,917
Vancouver.....	205	98,534	13	82,129	81	19,543
Victoria.....	66	77,300	6	28,211	32	19,407
Totals, 1936.....	1,217	1,131,607	83	249,061	420	200,788
1937.						
Halifax.....	101	127,837	15	50,609	Nil	-
Saint John.....	37	49,973	4	17,449	56	19,525
Quebec.....	54	36,197	Nil	-	10	3,126
Sorel.....	73	45,535	Nil	-	48	24,212
Montreal.....	115	109,085	Nil	-	81	12,677
Kingston.....	72	95,244	13	785	17	19,195
Toronto.....	240	464,352	28	35,176	17	14,349
Midland.....	105	53,889	2	4,939	37	26,478
Port Arthur.....	62	58,147	Nil	-	69	5,629
Vancouver.....	215	100,686	13	82,129	60	13,773
Victoria.....	70	89,478	6	28,212	29	16,270
Totals, 1937.....	1,144	1,230,423	81	219,299	424	155,234

¹ During the year the inspection work at Collingwood was merged with that of Toronto and Midland.

8.—Steamboat Inspection, by Inspection Divisions, fiscal years ended Mar. 31, 1936 and 1937—concluded.

Year and Division.	Vessels Subject to Inspection when in Commission.		Vessels Added to the Dominion Register.		Vessels Lost, Broken Up or Destroyed.	
	No.	gross tonnage.	No.	gross tonnage.	No.	gross tonnage.
1936.						
Halifax.....	120	201,173	Nil	—	2	225
Saint John.....	108	94,628	Nil	—	1	34
Quebec.....	72	45,622	Nil	—	Nil	—
Sorel.....	122	67,677	Nil	—	5	615
Montreal.....	205	130,265	Nil	—	Nil	—
Kingston.....	116	124,585	Nil	—	3	2,605
Toronto.....	278	431,697	3	18,393	3	391
Midland.....	124	72,907	1	37	2	275
Collingwood ¹	30	16,935	Nil	—	Nil	—
Port Arthur.....	142	70,843	7	209	7	854
Vancouver.....	299	200,206	5	1,222	4	9,847
Victoria.....	104	124,918	3	3,915	Nil	—
Totals, 1936.	1,720	1,551,456	19	23,776	27	14,546
1937.						
Halifax.....	116	178,446	Nil	—	2	1,478
Saint John.....	97	86,947	3	162	Nil	—
Quebec.....	64	39,323	2	485	Nil	—
Sorel.....	121	69,747	1	22	Nil	—
Montreal.....	196	121,762	Nil	—	1	1,981
Kingston.....	102	115,224	2	17	3	2,104
Toronto.....	285	513,877	5	9,469	4	1,874
Midland.....	144	85,306	Nil	—	4	193
Port Arthur.....	131	63,776	1	103	5	708
Vancouver.....	288	196,588	5	243	16	12,391
Victoria.....	105	133,960	1	2,054	4	6,324
Totals, 1937.	1,649	1,604,956	20	12,555	39	27,053

¹ During the year the inspection work at Collingwood was merged with that of Toronto and Midland.

Seamen Shipped and Discharged.—Table 9 shows, for each year from 1908 to 1936, the numbers of seamen shipped and discharged at Canadian ports under the provisions of the Canada Shipping Act (R.S.C., 1927, c. 186).

9.—Numbers of Seamen Shipped and Discharged at Canadian Ports, calendar years 1908-36.

Calendar Year.	Seamen Shipped.	Seamen Discharged.	Calendar Year.	Seamen Shipped.	Seamen Discharged.
1908.....	18,013	11,542	1923.....	31,407	30,195
1909.....	20,502	11,573	1924.....	30,687	29,018
1910.....	16,735	11,069	1925.....	31,772	28,472
1911.....	13,748	11,301	1926.....	31,869	27,413
1912.....	13,708	11,290	1927.....	28,137	25,863
1913.....	16,975	13,749	1928.....	28,748	25,763
1914.....	18,987	14,989	1929.....	31,374	29,483
1915.....	22,797	14,319	1930.....	26,983	25,670
1916.....	20,902	16,689	1931.....	24,891	24,289
1917.....	16,998	14,145	1932.....	25,313	23,472
1918.....	16,516	12,930	1933.....	27,038	23,148
1919.....	18,208	13,649	1934.....	27,234	23,558
1920.....	22,569	19,719	1935.....	26,527	23,924
1921.....	18,444	17,103	1936.....	29,052	30,269
1922.....	25,689	24,558			

Wrecks and Casualties.—The figures of Table 10, supplied by the Department of Transport, apply to vessels of every nationality in respect of wrecks and casualties in Canadian waters, and to Canadian vessels in respect of wrecks and casualties in other waters. The returns in some years cover wrecks and casualties of previous years.

10.—Canadian Wrecks and Casualties, 1911-36.

NOTE.—For details of the years 1870-1910, see Canada Year Book, 1911, p. 381.

Year.	Casualties.	Net Tonnage.	Lives Lost.	Stated Damages.	Year.	Casualties.	Net Tonnage.	Lives Lost.	Stated Damages.
	No.	tons.	No.	\$		No.	tons.	No.	\$
1911.....	271	122,619	48	942,093	1924.....	224	215,470	54	4,355,217
1912.....	293	269,569	59	1,053,768	1925.....	298	305,798	53	3,317,020
1913.....	275	270,905	160	1,963,870	1926.....	300	293,310	91	4,630,267
1914.....	255	210,368	1,083 ¹	4,983,775	1927.....	434	566,011	128	6,879,825
1915.....	280	214,036	70	1,459,012	1928.....	504	558,251	64	5,418,236
1916.....	308	242,996	67	1,377,442	1929.....	451	459,394	12	4,740,620
1917 ²	239	715,384	152	4,850,145 ³	1930.....	551	447,169	66	3,077,009
1918 ⁴	226	312,928	402 ⁵	1,818,395	1931.....	477	404,157	7	2,696,019
1919.....	240	205,720	100	1,808,690	1932.....	452	406,194	40	3,478,575
1920.....	227	222,928	28	1,643,825	1933.....	445	372,545	19	1,292,618
1921.....	260	588,503	38	1,809,328	1934.....	484	400,714	39	1,716,294
1922.....	277	604,423	27	451,312	1935.....	467	496,109	19	2,842,402
1923.....	376	480,713	50	3,184,749	1936.....	545	512,582	34	3,108,671

¹ Includes 1,042 lives lost in the *Empress of Ireland* disaster. ² Years ended June 30 for 1917 and earlier years. ³ Excluding damage to cargo estimated at \$4,310,350. ⁴ Years ended Dec. 31 for 1918 and subsequent years. ⁵ Includes 328 lives lost in the *Princess Sophia* disaster.

Section 2.—Financial Statistics of Waterways.

The principal statistics available to aid in making an appraisal of the cost of water-borne traffic consist of the record of public expenditures on waterways. Such expenditures are classified as investments which are shown in Table 11, and as annual expenditures for maintenance and operation, shown in Table 12, which are partly balanced by the revenues shown in Table 13. Undoubtedly, in so far as capital expenditures for the permanent improvement of waterways are concerned, those of the Dominion Government cover the major part. There has been some expenditure by municipalities on local harbour facilities, while private capital expenditure is also confined almost entirely to terminal or dockage facilities. The investment in shipping, however, with the exception of the Canadian National (West Indies) Steamships, as shown at p. 696, has come almost entirely from private sources such as railway companies, steamship companies, industrial corporations, and private individuals. No figures are available regarding private investments in shipping except those appearing in the reports of the operating companies which cover only a portion of the field. Neither are there statistics showing the revenues of ship operators from passenger and freight traffic. In the case of railways, statistics show fairly completely: (1) the investment in plant, roadbed, etc.; (2) the revenues of the railways or the annual payment by the people of Canada for the passenger and freight transportation; and (3) the annual deficits which are also indirectly paid by the public whether as investors or taxpayers. No such picture can be given for water-borne traffic.

Capital and Operation Expenditures.—In the following statement of investments by the Dominion Government, no amounts have been written off as a result of the destruction or abandonment of property such as the first, second, and third Welland canals and the Port Nelson terminal. Neither have the capital expenditures been reduced by allowances for depreciation.

The classification as between capital and operation expenditure is very difficult to make with respect to some items and cannot be regarded as minutely exact for the long period. This difficulty applies particularly in the case of dredging where the distinction between the removal of accumulating silt and the deepening of a channel is largely one of opinion. For this reason the dredging account of the Department of Public Works is not included in the total investments of Table 11, but is given at the end of the table since a large part of the work has been undoubtedly of the nature of a permanent improvement. This dredging account does not, how-

ever, include the total expenditures for dredging as some dredging expenditures have been distributed with other items. Both capital and operation costs include expenditures by the former Departments of Marine and of Railways and Canals, now the Department of Transport, and by the Department of Public Works.

11.—Capital Expenditures of the Dominion Government¹ on Waterways and Harbours to Mar. 31, 1937.

NOTE.—The dredging expenditures by the Department of Public Works shown separately at the end of this table cannot be accurately divided between capital and maintenance expenditures. However, since they have been largely for permanent improvements, they are shown here but are not included in the grand totals of capital expenditure. Other dredging expenditures are included in the various items.

Item.	Fiscal Year ended Mar. 31, 1937.	Total to Mar. 31, 1937.	Item.	Fiscal Year ended Mar. 31, 1937.	Total to Mar. 31, 1937.
AIDS TO NAVIGATION AND MISCELLANEOUS WORKS.	\$	\$	HARBOURS.	\$	\$
Lighthouses, construction, improvements and apparatus.....	418,647	24,662,283	Prescott elevator.....	58,032	5,016,757 ³
Radio-telegraph stations, construction.....	"	2,291,324	Port Colborne elevator...	Nil	3,279,613 ³
St. Lawrence ship channel (below Montreal) ¹	3,083,428	68,555,928	Hudson Bay Terminals—		
Dominion steamers.....	Nil	6,800,000	Port Nelson.....	Nil	6,240,201 ³
Dredging plant.....	53,322	8,246,766	Churchill.....	119,182	13,340,880 ³
Slides and booms.....	Nil	1,733,192	Harbour Commissions—		
Jacques Cartier bridge, Montreal.....	4,725	18,649,078 ³	Halifax.....	279,143	26,978,034
Second Narrows bridge, Vancouver.....	Nil	1,030,052 ³	Saint John.....	1,367,684	21,958,478
Other roads and bridges...	459,273	6,613,657	Chicoutimi.....	14,664	4,350,649
Other (Department of Public Works).....	6,620	2,944,152	Quebec.....	676,437	27,746,124
Other (Department of Transport).....	Nil	3,206,150	Three Rivers.....	184,179	7,457,210
Totals.....	4,026,015	144,732,582	Montreal.....	1,991,296	64,995,263
CANALS.			New Westminster.....	Nil	974,537
St. Lawrence River—			Vancouver.....	11,104	24,358,250
Lachine.....	52,835	16,252,785	Totals.....	4,701,721	206,695,996
Lake St. Louis.....	Nil	298,176	OTHER HARBOURS, RIVERS, CONSTRUCTION, IMPROVEMENTS, ETC.		
Soulanges.....	24,600	8,482,775	Prince Edward Island....	22,984	2,211,941
Beauharnois, old.....	54,062	1,955,902	Nova Scotia.....	314,362	13,748,142
Lake St. Francis.....	24,821	131,231	New Brunswick.....	183,180	17,267,800
Cornwall.....	1,543	7,907,311	Quebec.....	1,493,789	35,338,802
Williamsburg.....	2,059	1,757,347	Ontario.....	1,013,910	45,918,130
Farran's Point.....	Nil	877,091	Manitoba.....	34,202	3,068,369
Galops.....	Nil	6,143,468	Saskatchewan, Alberta and N.W.T.....	95,289	1,152,307
Rapide Plat.....	Nil	2,159,881	British Columbia.....	421,402	24,292,538
North channel, river reaches, and Galops channel.....	Cr. 316,677	3,518,869	Yukon.....	Nil	364,547
St. Lawrence Ship Canal	14,086	738,078	General.....	14,808	260,513
Ottawa and Rideau Rivers—			Totals.....	3,593,926	143,622,589
Ste. Anne lock.....	64,065	1,552,039	Grand Totals.....	12,495,838	756,918,478
Carillon and Grenville..	25,374	4,754,508	EXPENDITURES BY DEPARTMENTS.		
Rideau (including Tay)...	88,133	5,680,185	Transport.....	3,853,465	387,423,039
Richelieu River—			Public Works.....	4,113,141	167,060,460
St. Ours lock.....	Nil	921,246	Harbour Commissions...	4,529,232	202,434,979
Chambly.....	Cr. 48,057	1,948,781	EXPENDITURES ON DREDGING BY DEPARTMENT OF PUBLIC WORKS.		
Welland canals.....	3,781	5,261,622	Prince Edward Island....	119,588	2,368,992
Sault Ste. Marie.....	83,850	23,965,098	Nova Scotia.....	381,174	10,445,120
Trent.....	5,689	1,390,689	New Brunswick.....	105,222	14,530,498
Murray.....	4	1,523,572	Quebec.....	495,347	15,849,037
St. Peters.....	Nil	443,315	Ontario.....	582,098	30,376,060
St. Andrews.....	Nil	44,388	Manitoba.....	49,654	1,931,781
Culbute lock and dam....	Nil	47,223	Saskatchewan, Alberta, and N.W.T.....	4,000	195,453
Baie Verte.....	36,386	1,196,745	British Columbia.....	363,490	12,186,905
Hungry Bay dykes.....			Yukon.....	Nil	7,080
Canals, general.....			General.....	Nil	152,964
Totals.....	174,176	261,867,311	Totals.....	2,100,573	88,043,920

¹ Includes some expenditure not included in the 1937 Year Book and by authorities other than the Dominion Government. ² Not separated from expenditures on lighthouses. ³ These are the fixed assets as reported by the National Harbours Board at Dec. 31, 1936, and are included in the totals for Montreal and Vancouver, respectively, under Harbours.

⁴ Not segregated from Public Works expenditures. ⁵ Includes "Income Expenditure" for buildings and permanent improvements to canals and harbours. ⁶ These are the fixed assets as reported by the National Harbours Board at Dec. 31, 1936.

12.—Expenditures of the Dominion Government for Maintenance and Operation of Aids to Navigation, Canals and Harbours, fiscal years ended Mar. 31, 1935-37.

Item.	1935.	1936.	1937.
	\$	\$	\$
AIDS TO NAVIGATION AND MISCELLANEOUS ITEMS.			
Lighthouses and Coast Service—			
Agencies, rents and contingencies.....	186,145	195,889	196,854
Maintenance.....	741,926	777,059	1,557,108
Salaries of light-keepers.....	658,737	692,511	
Repairs to wharves.....	6,349	5,657	7,136
Ice-breaking (Thunder Bay).....	30,000	40,500	30,000
Radio-telegraph service.....	492,469	543,415	552,950
Dominion steamers.....	1,499,334	1,314,705	1,423,612
Life saving ¹	45,078	50,439	45,793
Hydrographic survey ¹	404,922	408,697	407,645
Marine signal service ¹	93,909	99,885	99,482
Administration of pilotage ¹	86,227	103,518	90,281
Removal of obstructions.....	16,216	3,680	52,568
Subsidy to wrecking plants.....	40,000	43,750	45,000
Dredging plant.....	74,308	70,163	66,641
Roads and bridges.....	33,902	48,213	61,925
Miscellaneous (D.P.W.).....	81,285	93,003	33,663
Totals.....	4,490,807¹	4,491,084¹	4,670,658
CANALS.			
St. Lawrence River—			
Soulanges.....	112,843	141,237	134,873
Lachine.....	359,692	352,771	329,181
Cornwall.....	148,876	143,833	125,898
Williamsburg.....	90,845	94,029	90,528
Head offices for Ontario and Quebec.....	71,460	78,364	73,366
Dredge vessels.....	20,126	20,439	34,744
Hungry Bay dyke—St. Barbe.....	7,230	5,692	5,287
Welland.....	57,480	651,188	667,013
Welland Ship Canal.....	568,423		
Sault Ste. Marie.....	55,517	52,635	48,281
Richelieu River—			
St. Ours lock.....	6,386	9,321	9,376
Chambly.....	59,018	87,525	71,351
Ottawa and Rideau Rivers—			
Ste. Anne lock.....	8,905	9,426	11,342
Carillon and Grenville.....	73,601	81,866	88,454
Rideau (including Tay).....	141,376	152,113	150,189
Trent.....	178,295	187,806	199,135
Murray.....	13,344	17,924	10,482
St. Peters.....	9,875	9,679	10,251
Canals, general.....	Nil	Nil	1,329
Totals.....	1,983,292	2,095,848	2,062,080
HARBOURS, ELEVATORS, RIVERS, ETC.			
Port Colborne elevator.....	88,583	89,481	85,512
Prescott elevator.....	86,317	87,220	78,572
Churchill elevator.....	186,316	189,308	98,072
Hudson Bay terminals.....	"	"	68,104
Other Harbours and Rivers—			
Prince Edward Island.....	64,072	86,224	82,404
Nova Scotia.....	315,568	497,934	291,699
New Brunswick.....	348,990	432,337	383,883
Quebec.....	635,663	438,660	523,945
Ontario.....	186,103	218,304	130,923
Manitoba.....	28,251	38,643	30,992
Saskatchewan, Alberta and N.W.T.....	3,018	2,637	2,406
British Columbia.....	403,295	319,813	384,478
Yukon.....	Nil	14,571	8,641
General.....	434,252	453,597	373,998
Totals.....	2,780,328	2,878,729	2,543,629
Grand Totals.....	9,254,427¹	9,465,661¹	9,276,367
EXPENDITURES BY DEPARTMENTS.			
Railways and Canals.....	2,344,508	2,471,857	"
Marine.....	4,301,312 ¹	4,279,705 ¹	"
Transport.....	"	"	6,900,769
Public Works.....	2,608,607	2,714,099	2,375,598

¹ Revised since publication of the 1937 Year Book.

² Charged to Hudson Bay Railway in 1935 and 1936.

³ The Department of Transport in 1937 included the former Departments of Marine and of Railways and Canals.

13.—Revenue of the Dominion Government from the Operation of Aids to Navigation, Canals and Harbours, fiscal years ended Mar. 31, 1935-37.

Item.	1935.	1936.	1937.
	\$	\$	\$
AIDS TO NAVIGATION AND MISCELLANEOUS ITEMS.			
Radio revenue—traffic.....	52,670	56,714	59,840
Dominion steamers.....	2,928	2,759	793
Earnings of dredges and plant.....	431	5,114	8,170
Sundries and miscellaneous.....	23,481	23,831	32,194
Totals.....	79,510	88,418	100,997
CANALS.			
St. Lawrence River—			
Lachine.....	187,114	166,746	187,093
Beauharnois.....	59,516	59,526	59,619
Soulanges.....	4,257	4,057	4,175
Cornwall.....	25,560	38,660	32,306
Williamsburg.....	2,566	3,018	3,230
Welland canal.....	22,597	191,287	208,691
Welland Ship Canal.....	152,507		
Sault Ste. Marie.....	217	217	217
Richelieu River—			
Chambly.....	1,244	1,150	1,157
St. Ours lock.....	1	1	60
Ottawa and Rideau Rivers—			
Ste. Anne lock.....	387	189	241
Carillon and Grenville.....	1,628	1,559	1,567
Chats Falls.....	1	1	1
Rideau (including Tay).....	10,134	10,189	10,375
Trent.....	6,067	6,448	6,512
Murray.....	254	351	311
St. Peters.....	168	157	169
Sundries.....	3	2	3
Totals.....	474,220	483,557	515,727
HARBOURS.			
Churchill terminals.....	2	3,264	2,365
Prescott elevator.....	69,552	175,052	161,815
Port Colborne elevator.....	134,116	143,004	206,767
Churchill elevator.....	109,983	84,888	117,091
Earnings of dry docks.....	73,983	62,500	80,330
Rent, Kingston graving dock.....	6,050	12,100	Nil
Ferry privileges.....	2,706	3,022	2,847
Piers and wharves.....	111,973	111,189	139,849
Harbour dues.....	2,765	2,800	4,272
Totals.....	561,128	597,819	715,336
Grand Totals.....	1,114,858	1,169,794	1,332,060

¹ Included with Chambly canal.² Included with Hudson Bay Railway.

Shipping Subsidies.—The information given in the following table formerly appeared under the part of this chapter dealing with the Post Office but is now shown here because these subsidies are granted to assure the required steamship services rather than for the mere carriage of mails.

14.—Mail Subsidies and Steamship Subventions, fiscal years ended Mar. 31, 1935-37.

NOTE.—The figures in the following table were supplied by F. E. Bawden, Director of Steamship Subsidies, Department of Trade and Commerce. Such data appear annually in the annual report of the Auditor General and represent the amounts paid in connection with contracts made under statutory authority by the Department of Trade and Commerce for trade services, including the conveyance of mails.

Service.	1935.	1936.	1937.
	\$	\$	\$
Atlantic Ocean—			
Canada and Great Britain.....	500,000	500,000	250,000
Canada and South Africa.....	112,500	112,500	112,500
To assist in the carriage of lumber from Churchill, Man., to United Kingdom.....	2,500	Nil	Nil
Prince Edward Island and Boston.....	Nil	35,000	20,000
Pacific Ocean—			
British Columbia, Australia and/or China.....	110,713	118,800	136,650
Canada, China and Japan.....	690,000	749,000	600,000
Canada and New Zealand, on the Pacific.....	200,000	200,000	292,308
Prince Rupert, B.C., and the Queen Charlotte islands.....	12,000	12,000	12,000
Vancouver and the British West Indies.....	36,000	33,000	30,000
Vancouver and northern ports of British Columbia.....	18,000	18,000	18,000
Victoria, Vancouver, way ports and Skagway.....	12,000	12,000	12,000
Victoria and west coast Vancouver island.....	10,000	10,000	10,000
British Columbia and South Africa.....	84,000	84,000	84,000
Local Services—			
Baddeck and Iona.....	8,000	8,000	8,000
Charlottetown and Pictou.....	25,000	25,000	30,000
Charlottetown, Victoria and Holliday's wharf.....	4,600	4,213	Nil
Chester and Tancook island (winter).....	Nil	1,584	1,600
Grand Manan and the mainland.....	24,750	33,000	33,000
Halifax and Bay St. Lawrence.....	2,000	2,000	2,000
Halifax, Canso and Guysborough.....	6,750	6,750	6,750
Halifax, LaHave and LaHave River ports.....	2,000	2,000	1,981
Halifax and Sherbrooke.....	900	900	882
Halifax, south Cape Breton and Bras d'Or Lake ports.....	3,500	3,500	3,500
Halifax, Spry bay and Cape Breton ports.....	4,000	3,961	4,000
Halifax and west coast of Cape Breton.....	4,000	4,000	3,923
Ile aux Coudres and les Eboulements.....	786	1,100	1,100
Mulgrave, Arichat and Canso.....	33,750	33,750	33,750
Mulgrave and Guysborough, calling at intermediate ports.....	9,500	9,469	9,317
Murray bay and north shore (winter service).....	40,000	40,000	40,000
Parrsboro, Kingsport and Wolfville.....	2,000	1,873	1,500
Pelee island and the mainland.....	8,250	8,250	8,250
Pictou, Mulgrave and Cheticamp.....	11,000	11,000	11,000
Pictou, Souris and the Magdalen islands.....	37,500	37,500	37,500
Quebec, Natashquan and Harrington, and other ports on the north shore of the gulf of St. Lawrence.....	76,500	84,500	85,000
Quebec or Montreal and Gaspé, and other ports on the south shore of the gulf of St. Lawrence.....	54,000	60,000	60,000
Rimouski, Matane and the north shore of the lower St. Lawrence.....	37,500	50,000	50,000
Rivière du Loup and Tadoussac, and other north shore ports.....	9,000	12,000	10,000
St. Catherine's bay and Tadoussac.....	2,500	3,250	3,500
Saint John and Bridgetown.....	800	1,000	800
Saint John, Bear River, Annapolis and Granville.....	2,000	2,000	1,500
Saint John and Margaretville, and other ports on the bay of Fundy.....	2,800	2,800	2,500
Saint John and Minas Basin ports.....	3,500	3,500	5,000
Saint John and St. Andrews, calling at intermediate ports.....	3,000	3,000	3,000

14.—Mail Subsidies and Steamship Subventions, fiscal years ended Mar. 31, 1935-37 —concluded.

Service.	1935.	1936.	1937.
	\$	\$	\$
Local Services—concluded.			
Saint John, Westport and Yarmouth, and other way ports.....	13,000	13,000	13,000
Saint John and Weymouth.....	75	633	1,000
Summerville, Burlington and Windsor, N.S.....	750	750	750
Sydney and Bay St. Lawrence, calling at way ports.....	18,000	25,000	25,000
Sydney and Bras d'Or Lake ports, and ports on the west coast of Cape Breton.....	20,000	22,500	22,500
Sydney and Whycomagh.....	12,000	16,000	16,000
Inspection of subsidized steamship services.....	2,831	4,526	4,853
Totals.....	2,274,255	2,426,609	2,119,914

Merchant Marine Services Operated by the Canadian Government.

Canadian Government Merchant Marine.—The circumstances under which the Canadian Government became possessed of and responsible for the operations of a merchant marine are explained on p. 776 of the 1934-35 Year Book.

This merchant fleet reached its greatest development in 1924 and at Dec. 31 of that year numbered 57 vessels of a total deadweight tonnage of 353,450, representing an original capital investment of \$79,661,921. On June 8, 1936, the 10 remaining vessels were disposed of for a consideration of \$389,444. A table showing the operating results from 1919 to 1936 appeared at p. 689 of the 1937 Year Book.

Canadian National (West Indies) Steamships.—In conformity with the Canada-West Indies Trade Agreement Act of 1926 (16-17 Geo. V, c. 16), the Dominion Government has provided direct steamship services to the West Indies through the medium of Canadian National (West Indies) Steamships, Ltd. The service is provided by a fleet of eleven vessels of a total deadweight tonnage of 62,486. Five of these boats, known as the 'Lady' ships, were specially constructed for passenger service on this route, while the remaining six vessels previously formed part of the Canadian Government Merchant Marine fleet, and were taken over by the Canadian National (West Indies) Steamships, Ltd., for operating purposes, under entrusting agreements with the respective companies which owned the ships. The investment in vessels at Dec. 31, 1936, amounted to \$10,942,896, mainly made up of the construction cost of the 'Lady' ships and the present-day valuation of the other six ships, together with the cost of conversion for use in the West Indies service of three of the latter. The financial results of the operations of the Canadian National (West Indies) Steamships, Ltd., have been as follows:—

Calendar Year.	Operating Revenues.	Operating Expenses.	Operating Net.	Depreci- ation.	Interest.	Book Loss.
	\$	\$	\$	\$	\$	\$
1929.....	3,332,683	3,780,524	-447,841	227,315	442,739	1,117,895
1930.....	3,792,694	4,315,831	-523,137	288,999	550,519	1,362,655
1931.....	3,648,986	4,095,555	-446,569	294,141	604,651	1,345,361
1932.....	3,323,077	3,606,793	-283,716	321,261	688,037	1,293,014
1933.....	2,956,974	3,454,972	-497,998	319,967	726,108	1,544,073
1934.....	3,509,738	3,606,416	- 96,678	319,967	762,033	1,178,673
1935.....	3,816,246	3,616,215	+200,031	325,513	788,814	917,390
1936.....	4,322,593	3,765,194	+557,399	328,235	800,282	574,213

Section 3.—Water Traffic and Services.

Complete statistics, comparable to those given for the railways, showing all the freight carried by water, are not available. Indeed it would be very difficult to obtain a record of the traffic handled by small independent coasting vessels. However, there is a record of the number and tonnage of ships calling at all ports and of all the cargoes which pass through the canals.

Subsection 1.—Shipping.

Canadian shipping may be divided into three classes: (1) ocean or sea-going shipping; (2) inland or rivers and lakes international shipping (exclusive of ferriage); and (3) coasting trade or coastwise shipping. Ocean shipping covers the sea-going vessels arriving or departing from Atlantic and Pacific Coast ports, including St. Lawrence River ports up to Montreal. Inland international shipping is the term used to cover shipping between Canadian and United States ports on the Great Lakes and international rivers, and on lakes and rivers accessible to shipping from United States ports such as the Ottawa, Rideau, Trent, etc. (Ferriage is, however, excluded from this and other classes of shipping.) Coastwise shipping or the coasting trade covers shipping between one Canadian port and another on the Atlantic coast, on the Pacific coast, and on the inland international lakes and rivers or lakes and rivers accessible to them. It does not, however, include shipping on isolated Canadian waterways, such as the Mackenzie river, lake Winnipeg, lake St. John, etc.

Ocean Shipping.—Canadian ocean shipping dates back to the days of early European fishermen who frequented the shores of Newfoundland and the Maritime Provinces. Later on, exploration and settlement produced a larger volume of traffic. The first ocean-going vessels in Canada were probably built by Pont-Gravé, one of the first settlers in New France, and soon afterwards Talon and Hocquart, intendants of the colony, realizing the advantages offered by the timber resources available, gave ship-building every encouragement. Shipyards were established at Quebec and other points along the St. Lawrence, and these, together with later establishments in the Maritime Provinces and on the western coast, have formed the principal bases of Canadian shipping on the Atlantic and the Pacific.

Canadian shipping attained some prominence in the days of fast wooden sailing vessels, and also at a later date when steam power first came into use. In 1833, the *Royal William*, a Canadian ship built to ply between Quebec and Halifax, crossed the Atlantic from Pictou to London, and was the first vessel to navigate the Atlantic entirely under steam power. At the present time, in addition to other lines, the Canadian Pacific Railway operates fleets on the Atlantic and Pacific oceans, and the Dominion Government operates a fleet in the West Indies trade.

The following table has been compiled from the Shipping Reports of the Department of National Revenue for the individual fiscal years.

15.—Sea-Going Vessels Entered and Cleared at Canadian Ports with Cargo and in Ballast, fiscal years ended Mar. 31, 1911-37.

NOTE.—The figures in this table are compiled from Statement X of the Shipping Reports of the Department of National Revenue. For the years 1868-1910, see Canada Year Book, 1911, p. 379.

Fiscal Year.	British, Entered and Cleared.			Canadian, Entered and Cleared.			Foreign, Entered and Cleared.		
	No.	Tons Register.	Freight Tons. ¹	No.	Tons Register.	Freight Tons. ¹	No.	Tons Register.	Freight Tons. ¹
1911....	6,870	12,712,337	4,742,064	10,607	3,341,998	²	12,467	6,242,851	²
1912....	6,766	13,342,929	5,121,818	10,966	4,618,183	1,000,979	15,134	6,628,513	3,014,537
1913....	7,307	13,896,353	6,043,747	11,810	4,530,835	1,076,228	16,549	7,803,910	3,902,488
1914....	7,418	15,711,849	6,935,729	12,786	5,160,799	1,123,325	15,811	8,695,838	4,022,299
1915....	6,949	13,931,091	7,145,630	11,903	4,005,011	1,025,667	15,060	7,466,484	3,911,171
1916....	6,817	12,417,944	6,470,715	12,386	3,894,731	1,392,601	18,559	8,514,975	4,266,934
1917....	7,387	16,144,873	8,524,208	12,241	4,343,448	1,471,488	18,500	8,778,753	4,563,657
1918....	7,337	16,959,790	9,592,934	10,998	4,343,853	1,699,612	16,597	11,483,484	3,916,427
1919....	6,099	14,054,166	8,421,383	11,115	3,758,528	1,748,357	15,021	7,448,699	3,557,596
1920....	5,511	12,320,994	6,709,206	11,994	4,434,634	1,921,237	17,353	8,489,126	4,034,045
1921....	4,526	10,545,619	5,737,923	12,490	5,510,484	2,543,550	17,624	8,860,626	3,933,945
1922....	4,239	10,471,403	4,810,493	14,929	6,861,202	3,197,917	17,170	10,261,865	4,409,105
1923....	4,869	13,868,905	6,431,073	16,693	7,463,809	3,768,954	17,493	12,945,623	6,915,091
1924....	5,187	15,158,994	6,544,597	16,778	7,698,045	3,136,425	16,795	14,161,363	7,239,792
1925....	5,763	16,463,204	5,758,508	17,779	7,966,193	2,919,639	17,314	16,551,629	7,178,115
1926....	6,515	17,749,067	7,755,145	17,906	9,703,054	3,488,321	18,117	18,202,875	8,658,455
1927....	6,448	18,117,525	6,909,197	16,746	8,926,138	3,507,934	19,111	19,106,106	8,856,010
1928....	6,253	18,738,027	8,643,925	16,716	9,021,264	3,597,639	18,561	20,455,343	10,450,038
1929....	6,400	21,625,060	10,448,795	18,005	9,235,036	3,433,603	21,021	23,547,831	11,317,358
1930....	5,634	20,171,383	8,206,656	18,145	9,673,948	3,171,136	19,689	23,146,901	9,386,904
1931....	5,826	20,005,005	7,430,148	17,865	11,707,129	2,441,542	17,906	22,885,015	8,783,961
1932....	5,754	19,025,391	6,751,209	15,919	11,808,662	2,570,554	16,604	21,506,183	8,198,158
1933....	6,323	20,865,151	9,129,496	13,864	9,041,203	1,929,213	15,741	19,860,478	7,314,492
1934....	6,831	22,480,487	8,746,708	17,110	9,391,625	2,474,602	15,464	23,573,742	7,663,478
1935....	7,678	23,676,256	9,392,527	18,788	11,450,147	2,567,636	16,737	21,933,445	8,375,350
1936....	8,095	24,593,603	10,377,917	21,663	13,104,753	3,030,463	16,405	20,354,271	8,914,230
1937....	9,581	27,299,731	12,775,530	23,905	13,334,472	3,085,518	17,998	22,313,808	11,072,578
Fiscal Year.	Totals Entered.			Totals Cleared.			Totals, Entered and Cleared.		
	No.	Tons Register.	Freight Tons. ¹	No.	Tons Register.	Freight Tons. ¹	No.	Tons Register.	Freight Tons. ¹
1911....	15,235	11,919,339	²	14,709	10,377,847	²	29,944	22,297,186	²
1912....	16,642	12,768,191	3,337,806	16,224	11,821,414	5,799,528	32,866	24,589,605	9,137,334
1913....	18,087	13,575,193	4,204,082	17,579	12,655,905	6,818,381	35,666	26,231,098	11,022,463
1914....	18,320	14,982,393	4,769,563	17,695	14,586,093	7,311,790	36,015	29,568,486	12,081,353
1915....	17,182	13,132,944	4,440,583	16,730	12,269,642	7,641,885	33,912	25,402,586	12,082,468
1916....	19,146	12,616,927	3,169,448	18,616	12,210,723	9,020,802	37,762	24,827,650	12,190,250
1917....	19,166	14,789,781	4,034,017	18,962	14,477,293	10,525,336	38,128	29,267,074	14,559,353
1918....	17,229	15,780,160	4,540,684	17,703	17,006,967	10,668,289	34,932	32,787,127	15,208,973
1919....	15,803	11,694,613	4,429,994	16,543	13,566,780	9,697,342	32,346	25,261,393	14,127,336
1920....	17,081	12,010,374	3,187,764	17,777	13,234,380	9,476,724	34,858	25,244,754	12,664,488
1921....	17,358	12,516,503	3,465,204	17,282	12,400,226	10,750,214	34,640	24,916,729	12,215,418
1922....	18,157	13,620,183	3,254,618	18,181	13,974,287	9,162,897	36,338	27,594,470	12,417,515
1923....	19,462	17,095,883	4,764,309	19,593	17,182,454	12,350,809	39,055	34,278,337	17,115,118
1924....	19,261	18,497,025	5,095,428	19,499	18,521,877	11,825,386	38,760	37,018,402	16,920,814
1925....	20,436	20,470,379	4,410,225	20,420	20,510,647	11,446,037	40,856	40,981,026	15,856,262
1926....	21,185	22,837,720	6,351,872	21,353	22,817,276	13,550,499	42,538	45,654,996	19,901,921
1927....	21,382	23,224,281	5,856,591	20,923	22,925,488	13,416,550	42,305	46,149,769	19,273,141
1928....	20,903	24,240,847	7,024,759	20,627	23,973,787	15,666,843	41,530	48,214,634	22,691,602
1929....	22,531	27,464,158	7,155,130	22,895	26,944,369	18,044,626	45,426	54,408,527	25,199,756
1930....	21,583	27,155,766	8,471,107	21,855	25,836,466	12,293,538	43,468	52,992,232	20,764,696
1931....	20,737	28,064,762	7,814,115	20,860	26,535,387	10,841,536	41,597	54,600,149	18,655,651
1932....	19,175	27,003,210	6,820,915	19,102	25,337,031	10,699,016	38,277	52,340,241	17,519,931
1933....	17,778	25,044,389	6,570,607	18,150	24,722,443	11,802,594	35,928	49,766,832	18,373,201
1934....	19,501	28,209,947	7,667,915	19,904	27,235,907	11,216,873	39,405	55,445,854	18,884,788
1935....	21,419	28,512,257	9,099,787	21,784	28,547,591	11,235,726	43,203	57,059,848	20,335,513
1936....	22,835	28,895,751	10,025,922	23,328	29,156,876	12,296,688	46,163	58,052,627	22,322,610
1937....	25,348	31,145,065	11,142,357	26,136	31,802,946	15,791,269	51,484	62,948,011	26,933,626

¹ Includes freight in both tons weight and tons measurement.

² Not available.

Inland Shipping.—Inland shipping is associated in its beginnings with the birch-bark canoe of the American Indian. Later the *bateau* and Durham boat came into common use after the migration of the U.E. Loyalists. In the absence at that time of any roads to make land travel possible, the St. Lawrence river and the Great Lakes formed the main highway to the interior. The route from Montreal to the Upper Lakes was broken at three places—from Montreal to Kingston transportation was by *bateau* or Durham boat; from Kingston to Queenston schooners were used; then there was the portage road from Queenston to Chippawa and, finally, schooner again to the destination.

In 1809, the *Accommodation*, the first Canadian steamship, was built for the Hon. John Molson, to run between Montreal and Quebec. On lake Ontario, the *Frontenac* was used from 1817 on a weekly service between York and Prescott and, following this beginning, came a period of great activity in lake and river shipping. In 1845, the *Gore* reached lake Huron by way of the Welland canal to carry on transport trade on the Upper Lakes, where previously there had not been enough traffic to support a large ship. Shipping on the Upper Lakes became brisker now, for there were settlers to be carried from Buffalo to the western United States and grain to be brought back. In this period Canadian shipping made its profit by carrying United States goods, for there was little traffic originating in the Canadian near-West.

Upon the advent of steam railways, water-borne traffic did not decrease but, on the contrary, increased, and at present the greater part of the western grain is shipped *via* the Great Lakes route to eastern ports. The iron ore and coal traffic between lake Superior and lake Erie is chiefly United States traffic and sometimes exceeds 80 million short tons in a year; the total traffic on these Upper Lakes alone is greater than that carried by all Canadian railways and about one-twelfth of that carried by all United States railways.

Totals of inland shipping are given for each fiscal year since 1923, and by provinces for the latest year, in Table 17, p. 702.

Coasting Trade.—This form of water-borne traffic has assumed great importance in Canada owing to the long coast lines on the Atlantic and Pacific oceans and along the Great Lakes and St. Lawrence River system. The movement of grain from Fort William and Port Arthur to Canadian ports on the Lower Lakes and to Montreal is one important factor in coastwise shipping. The registered tonnage of vessels engaged in the coastwise movement is shown for each fiscal year since 1923, and by provinces for the latest year, in Table 17.

Shipping by Ports.—The volume of shipping in the leading ports of the provinces of Canada is shown in Table 16. Details are given of the sea-going vessels, and of the total of all shipping (exclusive of ferriage) arrived at and departed from each port. In the fiscal year ended Mar. 31, 1937, the tonnage of sea-going vessels arriving at and departing from Vancouver exceeded that of any other port in Canada; Victoria was next, followed by Montreal and Halifax. In total shipping, which included coastwise and inland international as well as sea-going shipping, Vancouver was considerably in the lead, followed by Montreal, Victoria, and Halifax.

16.—Numbers and Tonnages of Sea-Going and of All Vessels (Exclusive of Ferriage), Entered and Cleared at each Principal Canadian Port, fiscal year ended Mar. 31, 1937.

NOTE.—For details of coastwise and inland international shipping at these ports and at all other ports of Canada, see the Shipping Report of the Department of National Revenue for the fiscal year ended Mar. 31, 1937.

Province and Port.	Sea-Going Vessels.				Total Shipping.			
	Arrived.		Departed.		Arrived.		Departed.	
	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.
Prince Edward Island—								
Charlottetown.....	39	34,275	80	47,368	637	230,304	661	239,569
Nova Scotia—								
Baddeck.....	10	3,502	11	3,582	773	66,596	773	66,596
Canso.....	65	8,081	121	13,372	1,188	140,910	1,268	145,082
Digby.....	56	37,224	65	41,242	614	693,816	614	693,530
Halifax.....	1,352	3,032,243	1,525	3,353,259	2,997	3,854,339	3,018	4,252,626
Liverpool.....	161	94,479	161	93,198	297	173,786	308	177,233
Louisburg.....	107	45,567	117	52,954	348	103,204	345	96,827
Lunenburg.....	415	35,865	449	32,938	603	52,479	644	52,746
North Sydney.....	1,438	287,624	1,508	292,277	2,096	661,869	2,134	664,843
Parrsboro.....	63	26,565	72	46,779	473	77,180	483	88,989
Pictou.....	13	10,544	29	20,730	484	195,070	491	195,946
Port Mulgrave.....	7	3,837	16	13,714	903	108,098	902	116,729
Sydney.....	342	667,353	457	899,317	1,650	2,491,196	1,665	2,441,305
Windsor.....	125	199,705	122	199,807	192	218,499	192	218,096
Yarmouth.....	535	519,279	503	475,861	985	644,404	998	607,166
New Brunswick—								
Campobello.....	891	97,469	895	91,069	1,136	196,054	1,149	190,644
Dalhousie.....	27	82,793	29	92,962	44	120,082	43	120,249
North Head.....	436	89,972	396	85,549	577	108,988	540	104,510
Saint John.....	821	1,466,117	829	1,485,821	2,814	2,435,215	2,843	2,440,543
St. Andrews.....	2,622	122,650	2,660	126,107	3,122	202,439	3,154	203,267
Quebec—								
Chicoutimi.....	3	4,075	1	2,786	156	37,627	158	37,784
Gaspe.....	9	32,189	29	57,317	195	111,813	195	111,782
Lévis.....	5	6,249	1	1,471	122	145,699	120	145,381
Montreal.....	1,172	4,316,241	1,080	4,081,445	5,968	8,948,953	5,993	8,961,002
Port Alfred.....	64	146,732	56	148,990	254	573,517	254	573,479
Quebec.....	399	2,034,318	406	1,875,254	2,892	4,188,453	2,906	4,186,314
Rimouski.....	12	55,142	48	70,511	1,191	383,529	1,195	346,307
Rivière du Loup.....	2	1,558	1	832	266	212,010	266	212,900
Sorel.....	74	209,791	122	334,881	1,096	1,854,929	1,100	1,850,493
Three Rivers.....	148	400,318	148	400,318	1,727	1,851,395	1,734	1,832,766
Ontario—								
Amherstburg.....	-	-	-	-	417	340,118	396	338,947
Belleville.....	-	-	-	-	111	46,294	111	46,294
Brockville.....	-	-	-	-	1,263	488,973	1,262	488,969
Cobourg.....	-	-	-	-	403	1,257,479	403	1,257,574
Collingwood.....	-	-	-	-	61	79,961	66	83,487
Cornwall.....	-	-	-	-	356	317,705	333	337,756
Depot Harbour.....	-	-	-	-	82	149,670	82	149,670
Erieau.....	-	-	-	-	149	228,772	153	230,954
Fort William.....	-	-	-	-	1,336	3,080,203	1,287	2,921,109
Goderich.....	-	-	-	-	189	276,013	170	297,164
Hamilton.....	-	-	-	-	805	1,528,152	635	1,267,557
Kingston.....	-	-	-	-	3,031	1,266,166	3,083	1,296,085
Leamington.....	-	-	-	-	520	272,692	518	266,908
Little Current.....	-	-	-	-	312	152,967	288	161,461
Midland.....	-	-	-	-	268	446,914	270	456,162
Niagara Falls.....	-	-	-	-	1,900	1,410,903	1,900	1,410,892
Owen Sound.....	-	-	-	-	226	224,855	226	228,211
Port Arthur.....	-	-	-	-	1,344	3,257,858	1,435	3,546,336
Port Colborne.....	-	-	-	-	862	1,421,410	874	1,411,759
Port Dover.....	-	-	-	-	187	9,903	185	9,811
Port McNicoll.....	-	-	-	-	91	236,837	91	244,592

16.—Numbers and Tonnages of Sea-Going and of All Vessels (Exclusive of Ferriage), Entered and Cleared at each Principal Canadian Port, fiscal year ended Mar. 31, 1937—concluded.

Province and Port.	Sea-Going Vessels.				Total Shipping.			
	Arrived.		Departed.		Arrived.		Departed.	
	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.
Ontario—concluded.								
Prescott.....	-	-	-	-	960	1,092,195	965	1,082,835
Sarnia ¹	-	-	-	-	17,042	3,601,860	17,047	3,604,773
Sault Ste. Marie.....	-	-	-	-	1,745	2,032,342	1,813	1,995,008
Thorold.....	1	775	9	7,141	497	691,801	508	677,813
Toronto.....	-	-	-	-	3,020	3,351,683	3,048	3,364,880
Walkerville.....	-	-	-	-	260	245,039	266	249,702
Wallaceburg.....	-	-	-	-	296	193,194	293	194,442
Welland.....	-	-	-	-	242	297,952	232	298,977
Windsor.....	-	-	-	-	999	1,704,592	975	1,692,013
Manitoba—								
Churchill.....	14	44,190	14	44,190	19	44,470	19	44,470
British Columbia—								
Alert Bay.....	97	14,397	102	17,470	1,332	599,372	1,339	603,214
Bamfield.....	25	7,634	35	8,896	679	109,628	682	109,618
Britannia Beach.....	146	242,330	168	250,575	1,095	466,712	1,097	468,305
Chemainus.....	464	839,432	484	840,171	815	914,388	815	910,512
Nanaimo.....	857	483,659	858	480,055	3,498	1,557,850	3,488	1,547,253
New Westminster.....	659	1,784,643	646	1,787,007	2,239	2,203,751	12,284	2,204,980
Ocean Falls.....	47	61,916	77	124,266	969	688,718	962	690,957
Port Alberni.....	357	843,060	357	843,509	767	1,000,289	772	997,917
Powell River.....	211	384,048	241	403,109	2,267	1,291,373	2,283	1,310,329
Prince Rupert.....	2,251	222,889	2,324	241,702	3,730	864,129	3,792	865,101
Quatsino.....	46	86,758	58	100,529	296	157,501	299	157,779
Stewart.....	14	12,082	20	21,652	155	152,884	160	154,210
Sidney.....	682	149,230	647	141,886	1,005	306,802	1,001	305,485
Union Bay.....	108	299,087	128	317,456	945	615,557	955	618,947
Vancouver.....	3,094	6,829,667	2,980	6,814,392	16,635	11,415,984	16,766	11,824,810
Victoria.....	2,561	4,425,833	2,572	4,442,177	5,535	6,801,521	5,558	6,793,818

¹ Since the ferry at Sarnia operates without a ferry permit, the "arrived" and "departed" figures for this port each include ferriage to the amount of 15,217 vessels and 1,678,272 tons register.

Grand Total Shipping Trade.—Statistics are given in Table 17 showing sea-going, inland international, coastwise and total vessels (exclusive of ferriage), entered and cleared at Canadian ports, by provinces, during the fiscal year ended Mar. 31, 1937, and totals for the fiscal years 1923 to 1937. It is noteworthy in this table that the volume of coastwise shipping is the greatest, while sea-going is next in tonnage. Both sea-going and coastwise shipping show marked expansion since 1923, although the effect of the depression is evident here also. Inland international shipping, on the other hand, has varied considerably and showed a more definite decrease during the depression. The total tonnage of shipping entered and cleared was greater for Ontario than for British Columbia in the fiscal year ended 1937. This was partly due to the fact that the great bulk of the inland international shipping was through Ontario ports, while there was also a large tonnage of coasting trade through these ports. It will be noted, however, from the footnotes to Tables 16 and 17 that a certain amount of ferriage, at Sarnia, is included in the Ontario figures. After making a deduction for this ferriage, the tonnage of total shipping in 1937 was slightly greater for British Columbia than for Ontario, after which came Quebec, Nova Scotia, and New Brunswick.

17.—Numbers and Tonnages of All Vessels (Exclusive of Ferriage), Entered and Cleared at Canadian Ports, 1923-37, With Details by Provinces for the fiscal year ended Mar. 31, 1937.

Year and Province.	Sea-Going.				Coastwise.			
	Arrived.		Departed.		Arrived.		Departed.	
	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.
Totals, 1923	19,462	17,095,883	19,593	17,182,454	82,560	36,240,041	80,033	34,730,037
Totals, 1924	19,261	18,497,025	19,499	18,521,377	88,035	39,268,712	84,762	38,096,416
Totals, 1925	20,436	20,470,379	20,420	20,510,647	87,185	40,480,372	87,091	40,139,447
Totals, 1926	21,185	22,837,720	21,353	22,817,276	88,693	41,770,480	87,878	41,117,175
Totals, 1927	21,382	23,224,281	20,923	22,925,488	92,222	43,124,919	90,814	42,617,467
Totals, 1928	20,903	24,240,847	20,627	23,973,787	94,981	45,381,586	91,714	44,116,030
Totals, 1929	22,531	27,464,158	22,895	26,944,369	95,947	49,044,588	93,905	48,007,097
Totals, 1930	21,583	27,155,766	21,885	25,836,466	82,265	43,668,866	82,197	44,067,907
Totals, 1931	20,737	28,064,762	20,860	26,535,387	77,507	47,134,652	77,354	47,540,555
Totals, 1932	19,175	27,003,210	19,102	25,337,031	69,875	44,912,972	70,112	45,311,899
Totals, 1933	17,778	25,044,389	18,150	24,722,443	64,875	41,975,393	64,688	41,100,788
Totals, 1934	19,501	28,209,947	19,904	27,235,907	66,915	41,923,543	66,895	41,843,250
Totals, 1935	21,419	28,512,257	21,784	28,547,591	68,441	43,146,037	68,545	42,827,149
Totals, 1936	22,835	28,895,751	23,328	29,156,876	69,809	42,979,361	69,633	41,815,616
1937.								
Prince Edward Island.....	77	53,683	129	67,196	1,198	340,734	1,170	335,511
Nova Scotia.....	5,546	5,130,912	6,123	5,791,213	12,310	4,933,842	12,023	4,639,103
New Brunswick.....	5,936	2,003,624	5,999	2,066,631	3,761	1,410,012	3,785	1,347,695
Quebec.....	1,903	7,221,953	1,917	6,987,742	11,729	10,467,814	11,563	10,357,151
Ontario.....	1	775	9	7,141	13,527	16,284,573	13,490	15,961,562
Manitoba.....	14	44,190	14	44,190	5	280	5	280
British Columbia.....	11,871	16,689,928	11,945	16,838,833	30,354	12,462,799	30,563	12,731,194
Yukon.....	Nil	-	Nil	-	139	73,776	140	74,846
Totals, 1937	25,348	31,145,065	26,136	31,802,946	73,033	45,973,830	72,739	45,447,342
Year and Province.	Inland International.				Totals.			
	Arrived.		Departed.		Arrived.		Departed.	
	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.
Totals, 1923 ¹	55,958	18,864,448	56,419	19,260,398	157,980	72,200,372	156,045	71,172,889
Totals, 1924 ¹	50,314	18,926,976	50,758	19,001,995	157,670	76,692,713	155,019	75,619,788
Totals, 1925 ¹	46,412	17,613,105	47,311	19,311,929	154,053	78,566,856	154,522	79,992,014
Totals, 1926 ¹	26,040	14,117,099	27,056	15,474,732	135,918	78,725,299	136,287	79,409,183
Totals, 1927 ¹	29,876	14,862,096	30,626	16,319,794	143,430	81,211,296	142,363	81,862,749
Totals, 1928 ¹	35,073	16,745,632	35,918	18,843,531	150,957	86,368,065	151,259	86,963,348
Totals, 1929 ¹	37,320	18,987,751	38,437	20,338,949	154,898	95,498,497	155,237	95,290,415
Totals, 1930 ¹	54,742	17,550,585	55,600	18,895,972	158,520	88,373,217	159,682	88,800,345
Totals, 1931 ¹	40,663	17,769,690	40,826	18,542,037	138,907	92,969,104	139,040	92,617,979
Totals, 1932 ¹	35,264	15,216,213	35,768	15,879,943	124,311	87,132,395	124,982	86,528,873
Totals, 1933 ¹	31,551	12,714,054	31,957	13,791,599	114,204	79,733,636	114,795	79,614,830
Totals, 1934 ¹	28,328	12,718,566	28,660	14,460,952	114,744	82,852,056	115,459	83,540,109
Totals, 1935 ¹	26,943	14,772,884	26,874	14,602,087	116,803	86,431,178	117,203	85,976,827
Totals, 1936 ¹	29,548	14,472,022	29,425	14,998,858	122,192	86,347,134	122,386	85,971,350
1937.								
Prince Edward Island.....	Nil	-	Nil	-	1,275	394,417	1,299	402,707
Nova Scotia.....	Nil	-	Nil	-	17,856	10,064,754	18,146	10,430,316
New Brunswick.....	Nil	-	Nil	-	9,697	3,413,636	9,784	3,414,326
Quebec.....	1,665	805,360	1,849	1,099,208	15,297	18,495,127	15,329	18,444,101
Ontario.....	29,930	14,749,412	29,880	14,965,563	43,468	31,034,760	43,379	30,934,266
Manitoba.....	Nil	-	Nil	-	19	44,470	19	44,470
British Columbia.....	2	60	2	60	42,227	29,152,787	42,510	29,570,087
Yukon.....	27	9,289	28	9,783	166	83,065	168	84,629
Totals, 1937 ¹	31,621	15,564,121	31,759	16,074,611	130,005	92,683,016	130,634	93,324,902

¹ The Ontario figures and the totals for Inland International and Total Shipping are inclusive of ferriage at Sarnia amounting in each case of "arrived" and "departed" to: 13,180 vessels and 1,415,612 tons for 1934; 13,444 vessels and 1,433,031 tons for 1935; 14,583 vessels and 1,620,820 tons for 1936; and 15,217 vessels and 1,678,272 tons for 1937. Corresponding deductions for earlier years are not available. (See also footnote 1 to Table 16.)

Subsection 2.—Canal Traffic.

Since the canals of Canada are open to the vessels and traffic of all nations upon equal terms, United States traffic constitutes an important part of the total carried through certain canals, especially the Welland Ship Canal. This is shown in Tables 18 and 21. More complete details of the traffic through canals may be found in the annual report on Canal Statistics published by the Dominion Bureau of Statistics.

18.—Traffic through Canadian Canals, by Nationality of Vessels and Origin of Freight, navigation seasons 1911-37.

NOTE.—Figures include duplications where cargoes use two or more canals. For Canadian canal traffic from 1886 to 1899, see 1902 Year Book, p. 398, and for the figures of 1900-10, see the 1933 Year Book, p. 697.

Navigation Season.	Traffic.				Origin of Freight Carried.				
	Canadian Vessels.		United States Vessels. ¹		Canada.		United States. ¹		Total.
	No.	Registered Tonnage.	No.	Registered Tonnage.	Tons.	P.C. of Total.	Tons.	P.C. of Total.	Tons.
1911..	25,585	9,172,192	10,370	18,231,622	7,792,907	20.5	30,237,446	79.5	38,030,353
1912..	27,371	10,237,335	11,785	24,636,190	9,376,529	19.7	38,210,716	80.3	47,587,245
1913..	28,654	12,078,041	10,739	24,238,788	11,130,875	21.3	40,923,038	78.7	52,053,913
1914 ² ..	26,125	12,050,856	7,742	15,636,414	9,382,206	25.3	27,641,031	74.7	37,023,237 ²
1915..	21,575	9,398,207	6,415	7,385,101	6,789,423	44.7	8,409,380	55.3	15,198,803
1916..	23,002	9,839,029	6,800	10,660,839	7,486,962	31.7	16,096,529	68.3	23,583,491
1917..	21,588	9,831,694	6,594	10,259,772	5,964,369	26.8	16,274,566	73.2	22,238,935
1918..	18,909	7,800,972	6,791	9,616,200	3,369,477	17.8	15,514,142	82.2	18,883,619
1919 ³ ..	20,682	8,735,973	4,092	5,259,173	4,865,831	48.7	5,129,435	51.3	9,995,266 ³
1920..	23,038	8,521,643	3,826	3,838,890	4,094,044	46.9	4,641,339	53.1	8,735,383
1921..	25,720	10,079,388	2,969	2,330,178	4,562,028	48.5	4,844,993	51.5	9,407,021
1922..	26,217	11,059,261	3,735	3,165,054	6,273,227	62.1	3,752,828	37.9	10,026,055
1923..	27,112	13,013,970	3,399	3,325,809	7,637,485	68.2	3,561,949	31.8	11,199,434
1924..	27,467	13,988,909	3,233	2,821,177	8,857,177	68.8	4,011,920	31.2	12,869,097
1925..	28,361	14,964,785	3,587	3,824,924	9,570,311	67.7	4,560,356	32.3	14,130,667
1926..	27,965	14,542,485	3,543	3,144,866	9,656,190	71.7	3,821,473	28.3	13,477,663
1927..	36,162	17,472,601	4,013	3,364,461	11,863,931	67.8	5,624,380	32.2	17,488,311
1928..	30,575	17,435,176	3,973	3,270,591	13,882,592	74.2	4,837,849	25.8	18,720,441
1929..	25,917	13,741,071	2,400	2,323,351	9,689,718	70.7	4,009,929	29.3	13,699,647
1930..	24,100	14,489,045	2,063	1,684,576	10,955,113	74.0	3,848,221	26.0	14,803,334
1931..	25,830	15,869,553	1,821	1,749,231	11,433,737	70.6	4,755,337	29.4	16,189,074
1932..	19,854	15,255,970	2,061	2,681,078	13,242,773	73.7	4,717,877	26.3	17,960,650
1933..	21,364	15,225,022	2,200	3,045,876	12,724,925	67.8	6,055,564	32.2	18,780,489
1934..	22,217	14,766,837	2,044	2,969,981	10,813,922	59.8	7,255,330	40.2	18,069,252
1935..	23,822	15,290,797	2,035	2,578,091	11,187,082	61.5	7,018,907	38.5	18,205,989
1936..	25,251	17,085,749	2,708	3,208,829	13,465,460	62.7	8,003,356	37.3	21,468,816
1937..	24,669	17,904,774	2,869	3,526,939	11,911,241	51.0	11,439,759	49.0	23,351,000

¹ Includes a small percentage of vessels of other foreign countries.

² Third lock of United States Sault Ste. Marie canal opened Oct. 21, 1914.

³ Fourth lock of United States Sault Ste. Marie canal opened Sept. 18, 1919.

19.—Tonnage of Canal Traffic, by Canals and Classes of Products, navigation seasons 1936 and 1937.

NOTE.—Figures include duplications where cargoes use two or more canals.

Year and Canal.	Agricultural Products.	Animal Products.	Manu- factures.	Forest Products.	Mineral Products.	Total.
	tons.	tons.	tons.	tons.	tons.	tons.
1936..						
Sault Ste. Marie.....	1,451,177	807	267,021	116,832	442,399	2,278,236
Welland Ship.....	3,183,459	2,254	1,856,272	537,616	4,857,202	10,436,803
St. Lawrence River.....	3,194,661	7,381	1,700,263	758,638	2,627,581	8,288,524
Richelieu River.....	3,098	188	28,544	7,158	40,743	79,731
St. Peters.....	4,467	2,029	4,063	25,088	20,610	56,257
Murray.....	Nil	Nil	Nil	Nil	4,906	4,906
Ottawa River.....	800	45	97,197	9,912	153,539	261,493
Rideau.....	Nil	45	5,334	2,245	7,980	15,604
Trent.....	74	9	336	22,960	668	24,047
St. Andrews.....	2	1,097	208	15,334	6,574	23,215
Totals, 1936.....	7,837,738	13,855	3,959,238	1,495,783	8,162,202	21,468,816

19.—Tonnage of Canal Traffic, by Canals and Classes of Products, navigation seasons 1936 and 1937—concluded.

Year and Canal.	Agricultural Products.	Animal Products.	Manufactures.	Forest Products.	Mineral Products.	Total.
	tons.	tons.	tons.	tons.	tons.	tons.
1937.						
Sault Ste. Marie.....	1,014,698	950	303,566	107,041	393,674	1,819,929
Welland Ship.....	3,583,282	1,121	1,899,573	497,288	5,766,686	11,747,950
St. Lawrence River.....	3,558,640	6,044	1,808,625	736,577	3,085,553	9,195,439
Richelieu River.....	584	312	61,064	5,971	55,813	123,744
St. Peters.....	5,964	1,586	6,663	40,173	25,566	79,952
Murray.....	Nil	Nil	150	Nil	2,215	2,365
Ottawa River.....	229	60	125,840	5,312	217,637	349,078
Rideau.....	2	50	5,117	3,667	10,645	16,451
Trent.....	68	25	405	1,002	848	2,348
St. Andrews.....	Nil	3,391	54	7,913	2,356	13,714
Totals, 1937.....	8,163,467	13,539	4,211,057	1,401,944	9,560,993¹	23,351,000

¹ Includes 1,588,377 tons of miscellaneous freight.

20.—Principal Commodities Carried through Canadian Canals, navigation seasons 1934-37.

NOTE.—Figures include duplications where cargoes use two or more canals.

Commodity.	1934.	1935.	1936.	1937.	Increase in 1937.	Decrease in 1937.
	tons.	tons.	tons.	tons.	tons.	tons.
Barley.....	420,838	396,659	494,500	755,081	260,581	—
Corn.....	295,459	346,094	381,248	1,823,211	1,441,963	—
Oats.....	271,253	315,340	317,507	258,269	—	59,238
Rye.....	320,685	179,326	112,487	245,119	132,632	—
Flaxseed.....	77,849	67,013	110,056	222,791	112,735	—
Wheat.....	4,011,651	4,089,058	5,444,009	4,119,942	—	1,324,067
Other Grains.....	132	88,470	114,954	73,106	—	41,848
Flour.....	704,138	716,602	773,152	597,823	—	175,329
Hay.....	5,192	2,950	4,724	3,225	—	1,499
Other milled products.....	132,612	129,549	78,328	54,196	—	24,132
Fruits and vegetables.....	2,938	5,930	3,902	5,441	1,539	—
Potatoes.....	7,169	6,934	2,871	5,263	2,392	—
Poultry, game and fish.....	3,729	4,276	5,024	6,105	1,081	—
Dressed meats.....	415	376	2,105	97	—	2,008
Other packing-house products.....	2,445	1,694	1,906	2,908	1,002	—
All other animal products.....	7,893	7,995	4,820	4,429	—	391
Agricultural implements.....	11,154	19,212	8,763	12,660	3,897	—
Cement, bricks and lime.....	65,603	39,592	41,939	29,578	—	12,361
Iron, pig and bloom.....	16,407	31,074	14,631	142,213	127,582	—
Iron and steel, all other.....	208,860	222,404	291,913	338,843	46,930	—
Gasolene.....	852,580	966,766	1,088,885	1,138,041	49,156	—
Petroleum and other oils.....	863,519	755,432	849,458	970,788	121,330	—
Sugar.....	332,234	322,167	308,308	256,485	—	51,823
Salt.....	68,558	78,040	74,127	102,767	28,640	—
Wines, liquors and beer.....	16,950	19,941	16,161	15,447	—	714
Paper.....	322,692	387,400	406,828	515,668	108,840	—
Wood-pulp.....	570,074	780,090	799,192	606,836	—	192,356
Automobiles and parts.....	53,479	68,861	59,033	81,731	22,698	—
Pulpwood.....	1,288,338	1,124,916	1,388,154	1,331,699	—	56,455
Logs, posts, poles, piling.....	—	25,727	32,992	6,963	—	26,029
Firewood.....	—	16,273	6,685	5,810	—	875
Lumber mill and cooperage stock.....	58,894	47,432	60,707	55,779	—	4,928
Other forest products.....	22,075	5,898	7,245	1,693	—	4,460
Hard coal.....	413,309	446,367	380,910	266,193	—	115,809
Soft coal.....	3,941,982	3,714,568	4,339,090	5,617,723	1,278,633	—
Coke.....	492,405	295,329	406,142	336,733	—	69,409
Copper ore.....	8,700	8,693	12,559	5,061	—	7,498
Iron ore.....	608,533	657,995	863,632	1,077,709	214,077	—
Other ore.....	80,316	98,452	214,876	215,227	351	—
Sand, etc.....	329,413	426,952	388,444	453,970	65,526	—
All other freight.....	1,178,979	1,288,142	1,556,549	1,588,377	31,828	—
Totals.....	18,069,252	18,205,989	21,468,816	23,351,000	4,053,413	2,171,229

21.—Canal Traffic, by Direction and Origin, navigation seasons 1936 and 1937.

NOTE.—Figures include duplications where cargoes use two or more canals.

Year and Canal.	From Canadian to Canadian Ports.		From Canadian to United States Ports. ¹		From United States to United States Ports. ¹		From United States to Canadian Ports. ¹	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
1936.								
Sault Ste. Marie...	414,149	1,286,693	63,272	342,472	31,350	46,023	89,314	4,963
Welland Ship.....	894,334	3,122,667	1,292,245	72,215	446,757	403,794	72,535 ²	4,132,256 ²
St. Lawrence River	2,749,963	3,009,262	1,306,028	77,685	113,410	44,199	25,974	962,003
Richelieu River...	27,892	3,556	36,225	134	Nil	Nil	Nil	11,924
St. Peters.....	10,816	45,416	Nil	25	Nil	Nil	Nil	Nil
Murray.....	Nil	1,011	Nil	Nil	Nil	Nil	Nil	3,895
Ottawa River.....	103,237	138,842	Nil	18,872	Nil	Nil	542	Nil
Rideau.....	12,220	2,784	Nil	Nil	Nil	Nil	Nil	Nil
Trent.....	23,303	744	Nil	Nil	Nil	Nil	Nil	Nil
St. Andrews.....	18,941	4,274	Nil	Nil	Nil	Nil	Nil	Nil
Totals, 1936.	4,255,455	7,615,249	2,697,770	511,403	591,517	494,016	188,365²	5,115,041²
1937.								
Sault Ste. Marie...	407,200	880,547	95,072	231,305	36,528	40,597	77,092	51,588
Welland Ship.....	993,645	2,903,700	1,740,118	20,206	343,037	400,035	26,129	5,321,080
St. Lawrence River	3,144,516	2,832,391	1,555,911	55,949	67,148	41,335	12,841	1,485,348
Richelieu River...	30,334	2,046	66,651	Nil	Nil	Nil	Nil	24,713
St. Peters.....	14,193	65,359	Nil	300	Nil	Nil	100	Nil
Murray.....	50	100	Nil	Nil	Nil	Nil	Nil	2,215
Ottawa River.....	162,354	145,222	Nil	41,023	Nil	Nil	479	Nil
Rideau.....	13,745	2,736	Nil	Nil	Nil	Nil	Nil	Nil
Trent.....	1,653	695	Nil	Nil	Nil	Nil	Nil	Nil
St. Andrews.....	9,420	4,294	Nil	Nil	Nil	Nil	Nil	Nil
Totals, 1937.	4,777,110	6,837,090	3,457,752	348,783	446,713	481,967	116,641	6,884,944

Year and Canal.	Traffic by Direction.		Origins of Cargo.		Total Cargo.	Increase(+) or Decrease(−) on Previous Year.
	Up.	Down.	Canada.	United States. ¹		
	tons.	tons.	tons.	tons.	tons.	tons.
1936.						
Sault Ste. Marie.....	598,085	1,680,151	2,082,863	195,373	2,278,236	+346,189
Welland Ship.....	2,705,871 ²	7,730,932 ²	4,840,621	5,596,182	10,436,803	+1,483,420
St. Lawrence River.....	4,195,375	4,093,149	6,098,406	2,190,118	8,288,524	+1,414,869
Richelieu River.....	64,117	15,614	67,807	11,924	79,731	+35,512
St. Peters.....	10,816	45,441	56,257	Nil	56,257	+1,665
Murray.....	Nil	4,906	1,011	3,895	4,906	—15
Ottawa River.....	103,779	157,714	255,629	5,864	261,493	—28,033
Rideau.....	12,820	2,784	15,604	Nil	15,604	—4,822
Trent.....	23,303	744	24,047	Nil	24,047	+9,890
St. Andrews.....	18,941	4,274	23,215	Nil	23,215	+4,162
Totals, 1936.	7,733,107²	13,735,709²	13,465,460	8,003,356	21,468,816	+3,262,827
1937.						
Sault Ste. Marie.....	615,892	1,204,037	1,548,049	271,880	1,819,929	—458,307
Welland Ship.....	3,102,929	8,645,021	4,210,760	7,537,190	11,747,950	+1,311,147
St. Lawrence River.....	4,780,416	4,415,023	5,604,202	3,591,237	9,195,439	+906,915
Richelieu River.....	96,985	26,759	99,031	24,713	123,744	+44,013
St. Peters.....	14,293	65,659	79,852	100	79,952	+23,695
Murray.....	50	2,315	150	2,215	2,365	—2,541
Ottawa River.....	162,833	186,245	336,654	12,424	349,078	+87,535
Rideau.....	13,745	2,736	16,481	Nil	16,481	+877
Trent.....	1,653	695	2,348	Nil	2,348	—21,099
St. Andrews.....	9,420	4,294	13,714	Nil	13,714	—9,501
Totals, 1937.	8,798,216	14,552,784	11,911,241	11,439,759	23,351,000	+1,882,184

¹ Includes a small percentage of ports of other foreign countries.² Revised since the publication of the 1937 Year Book.

The canal traffic figures in the foregoing Tables, 18 to 21, include duplications where the same freight passes through two or more canals. Table 22 below eliminates most of this duplication for the St. Lawrence-Great Lakes system. Even in this analysis, however, grain traffic originating at Lake Superior ports and transhipped from Upper Lake to smaller boats at Port Colborne or other points on lakes Erie or Huron, is really a duplication although not appearing as such and is shown separately and deducted in the table. The elimination of duplications for Canadian canals only, is not feasible because both Canadian and United States vessels use the locks on both sides of the river at Sault Ste. Marie without the payment of tolls or other restrictions.

22.—Freight Traffic Using the St. Lawrence River, Welland Ship, and Sault Ste. Marie Canals, navigation season of 1937.

NOTE.—Excluding duplications.

Canals Used.	Up-Bound Freight.	Down-Bound Freight.	Total.
	tons.	tons.	tons.
St. Lawrence River only.....	2,972,622	1,550,416	4,523,038
St. Lawrence River and Welland Ship.....	1,997,687	2,301,327	4,299,014
St. Lawrence River, Welland Ship, and Sault Ste. Marie ¹	229,091	587,705	816,796
Welland Ship only.....	726,190	4,254,502	4,980,692
Welland Ship, and Sault Ste. Marie ¹	149,961	1,501,488	1,651,449
Sault Ste. Marie ¹ only.....	15,123,244	70,045,133	85,168,377
Totals.....	21,198,795	80,240,571	101,439,366
Deduct grain transhipped at Port Colborne and Buffalo.....	—	1,315,754	1,315,754
Totals.....	21,198,795	78,924,817	100,123,612

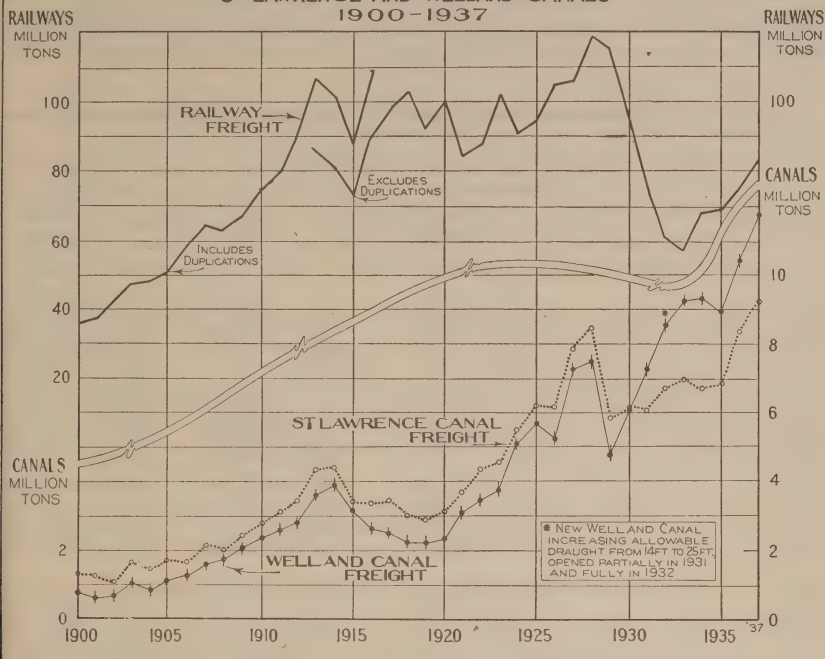
¹ Includes both Canadian and United States canals at Sault Ste. Marie.

The Panama Canal.*—The Panama canal, which was opened to commercial traffic on Aug. 15, 1914, is a waterway which is destined to be of the greatest importance to the British Columbian ports, from which vessels now leave direct for Great Britain and European ports throughout the year. As an alternative route to that of the transcontinental railway lines, such a passage by water is of vital importance in the solution of the larger transportation problems of the continent, and while its influence is perhaps more potential than actual, such a check on transcontinental rail rates is a valuable one. During the War the great expectations based upon the opening of the canal were not realized, owing to the scarcity of shipping, but, with the post-war decline in ocean freight rates, an increase in traffic between our Pacific ports and Europe has taken place, and, while the proportion carried in vessels of Canadian registry is comparatively small, the cargo tonnage has nevertheless assumed considerable proportions.

Table 23 shows the amount of traffic originating in or destined for Canada carried through the canal. The greater importance of the route as one from Pacific to Atlantic ports is illustrated by the much larger volume of freight originating at western ports than at eastern ports, and the larger volume destined for eastern than for western Canadian ports. Strictly inter-coastal Canadian cargo during the latest year aggregated 119,939 long tons as compared with 119,577 long tons in 1936.

*Revised, and figures supplied, by courtesy of the Governor of the Panama Canal Zone.

FREIGHT CARRIED BY CANADIAN STEAM RAILWAYS AND BY ST LAWRENCE AND WELLAND CANALS 1900-1937



23.—Traffic to and from the East and West Coasts of Canada via the Panama Canal, years ended June 30, 1921-37.

Year ended June 30—	Originating on—		Destined for—	
	Canada, West Coast.	Canada, East Coast.	Canada, West Coast.	Canada, East Coast.
	long tons.	long tons.	long tons.	long tons.
1921.....	125,638	39,561	126,414	16,558
1922.....	180,981	25,174	148,305	6,521
1923.....	604,546	92,939	101,588	125,283
1924.....	1,223,102	110,677	141,086	197,204
1925.....	1,082,282	121,803	158,709	379,284
1926.....	1,650,855	160,196	168,295	614,580
1927.....	1,548,783	207,003	248,009	803,418
1928.....	2,845,675	168,287	268,960	394,173
1929.....	2,650,646	231,128	266,433	539,767
1930.....	1,968,966	185,776	267,282	556,562
1931.....	2,307,257	137,756	271,621	492,532
1932.....	2,383,211	89,443	167,855	529,317
1933.....	2,896,162	121,875	134,511	328,038
1934.....	2,201,180	196,204	189,227	498,706
1935.....	2,490,203	248,658	176,698	547,974
1936.....	2,705,567	298,884	223,174	506,673
1937.....	2,780,243	379,783	240,221	589,011

With respect to total traffic through the canal by nationality of vessels and cargo carried, vessels of United States registration carried 9,844,254 tons, or 35.0 p.c. of the total cargo of 28,108,375 locked through in the fiscal year ended June 30, 1937. British vessels carried 7,179,136 tons, or 25.5 p.c.; Norwegian vessels 3,506,109 tons, or 12.5 p.c.; Japanese vessels 1,789,178 tons, or 6.4 p.c.; and German vessels 1,496,084 tons, or 5.3 p.c.

24.—Summary of Commercial Traffic through the Panama Canal, years ended June 30, 1915-37.

Year ended June 30—	Atlantic to Pacific.		Pacific to Atlantic.		Total Traffic.	
	Vessels.	Cargo Tonnage.	Vessels.	Cargo Tonnage.	Vessels.	Cargo Tonnage.
	No.	long tons.	No.	long tons.	No.	long tons.
1915.....	512	2,070,939	546	2,817,461	1,058	4,888,400
1916.....	376	1,369,018	348	1,724,317	724	3,093,335
1917.....	844	2,928,470	894	4,126,250	1,738	7,054,720
1918.....	877	2,638,116	1,112	4,887,652	1,989	7,525,768
1919.....	819	2,737,321	1,129	4,172,776	1,948	6,910,097
1920.....	1,130	4,091,964	1,263	5,280,410	2,393	9,372,374
1921.....	1,417	5,891,009	1,374	5,704,962	2,791	11,595,971
1922.....	1,469	5,495,164	1,196	5,387,443	2,665	10,882,607
1923.....	2,090	7,085,965	1,818	12,480,464	3,908	19,566,429
1924.....	2,697	7,858,969	2,461	19,134,198	5,158	26,993,167
1925.....	2,364	7,397,159	2,228	16,559,390	4,592	23,956,549
1926.....	2,698	8,034,593	2,389	17,995,423	5,087	26,030,016
1927.....	2,805	8,576,474	2,488	19,157,081	5,293	27,733,555
1928.....	3,284	8,303,344	2,969	21,312,307	6,253	29,615,651
1929.....	3,279	9,873,529	3,010	20,774,239	6,289	30,647,768
1930.....	3,051	9,472,061	2,976	20,546,368	6,027	30,018,429
1931.....	2,717	6,670,718	2,653	18,394,565	5,370	25,065,283
1932.....	2,273	5,631,717	2,089	14,167,269	4,362	19,798,986
1933.....	2,184	4,507,070	1,978	13,654,095	4,162	18,161,165
1934.....	2,753	6,162,649	2,481	18,541,360	5,234	24,704,009
1935.....	2,676	7,529,721	2,504	17,779,806	5,180	25,309,527
1936.....	2,770	8,249,899	2,612	18,256,044	5,382	26,505,943
1937.....	2,865	9,895,632	2,522	18,212,743	5,387	28,108,375

Subsection 3.—Harbour Traffic.

The freight movement through a large port takes a number of different forms. The overseas movement, *i.e.*, the freight loaded into or unloaded from sea-going vessels, frequently constitutes a surprisingly small part of the total. Usually the volume coming in and going out by coastwise vessels is larger. Then there is the 'in transit' movement in vessels which pass through the harbour without loading or unloading. Finally there is the movement from one point to another within the harbour, which in many ports amounts to a larger total than any of the other activities. With the consolidation of administrative activities in the Department of Transport, and the control of many of the leading ports in the National Harbours Board, traffic statistics for the seven harbours so administered are now obtainable from the Annual Reports of the Board. These harbours are Halifax, Saint John, Chicoutimi, Quebec, Three Rivers, Montreal, and Vancouver. There still exist divergencies of classification that render it difficult to compile a statement covering the total traffic for these seven harbours, and it is at present not possible to include the traffic of other ports not administered by the Board. Marked progress is noticeable since the Board was organized, however, and comparable basic summary statistics, even if not altogether comprehensive, will no doubt be evolved in the course of time.

PART V.—AIR NAVIGATION.*

Aircraft furnish a rapid and convenient means of transportation for passengers and supplies to remote and unsettled areas. The use of aircraft has made it possible to obtain accurate information for the development and conservation of natural resources in parts of Canada that would otherwise have been practically inaccessible. Air-mail and air-transportation lines and commercial services are increasing steadily in number and in the scope of their operations and usefulness.

The treatment of air navigation in this part of the Year Book is confined to civil aviation; the military activities and organizations are dealt with under National Defence (see "Air Service" in the Index). The subject is introduced with a section dealing with the history and administrative control of civil aviation and this is followed by sections on facilities and equipment, finances and employees, and traffic, along the lines of the treatment adopted in this chapter for other forms of transportation.

The collection and compilation of statistics of civil aviation was transferred from the Branch of the Controller of Civil Aviation to the Bureau of Statistics in 1936. To preserve continuity with aviation statistics published in previous Year Books, a statistical summary of civil aviation for the years 1932 to 1937 is given below in Table 1. The statistics collected since 1936 have been somewhat enlarged and consequently no comparisons with similar data for previous years can be made for items appearing in other tables of this Part.

*Descriptive and administrative information has been prepared from material supplied by J. A. Wilson, Controller of Civil Aviation, Department of Transport, while statistics have been compiled by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics.

1.—Statistical Summary of Civil Aviation in Canada, 1932-37.

NOTE.—Figures for 1921-23 may be found at p. 616 of the 1924 edition of the Year Book, for 1924-29 at p. 661 of the 1930 edition, and for 1930 and 1931 at p. 698 of the 1936 Year Book. Dashes in this table indicate that no information was reported under the corresponding head for those years.

Item.	1932.	1933.	1934.	1935.	1936.	1937.
	No.	No.	No.	No.	No.	No.
General Analysis.						
Firms manufacturing aircraft.....	7	7	6	10	7	9
Firms chiefly operating aircraft.....	73	87	125	123	116	162
Firms using aircraft as auxiliary service.	4	3	3	7	12	10
Aircraft flights made.....	102,219	106,252	128,031	153,211	160,014	202,534
Aircraft hours flown.....	56,170	53,299	75,871	88,451	101,935	126,550
Total aircraft mileage.....	4,569,131	4,538,315	6,497,637	7,522,102	7,803,942	10,626,630
Average flight duration (minutes).....	33	30	36	34	38	37
Pilots carried.....	102,219	106,252	128,031	173,211 ¹	132,096 ¹	200,930 ¹
Passengers and crew carried.....	76,800	85,006	105,306	157,472 ²	118,660 ²	160,517 ²
Total personnel carried.....	179,019	191,258	233,337	330,683	250,756	361,447
Pilots carried one mile (pilot miles).....	4,569,131	4,538,315	6,497,637	7,522,102 ¹	9,753,690 ¹	14,179,486 ¹
Passengers and crew carried 1 mile (passenger miles).....	2,869,799	3,816,862	6,266,475	7,936,950 ²	10,105,936 ²	14,690,872 ²
Total personnel carried 1 mile (personnel miles).....	7,438,930	8,355,177	12,764,112	15,459,052	19,859,626	28,870,358
Total freight or express carried (lb.).....	3,129,974	4,205,901	14,441,179	17,615,910	25,387,719	26,205,766
Total mail carried (lb.).....	413,687	539,358	625,040	1,126,084	1,161,069	1,411,213 ³
Licensed Civil Air Harbours.						
Total air harbours (all types).....	83	90	101	96	155	155

For footnotes see end of table, p. 710.

1.—Statistical Summary of Civil Aviation in Canada, 1932-37—concluded.

Item.	1932.	1933.	1934.	1935.	1936.	1937.
	No.	No.	No.	No.	No.	No.
Licensed Civil Aircraft.⁴						
Total aircraft (all types)—						
Gross weight—						
Up to 2,000 lb.....	416	331	—	—	—	316
2,001-4,000 lb.....	—	1	—	—	—	132
4,001-10,000 lb.....	1	—	—	—	—	147
Over 10,000 lb.....	—	—	—	—	5	9
Type—						
Sea boats.....	416	331	—	—	—	32
Amphibians.....	26	12	—	—	—	1
Land planes.....	2	1	—	—	—	322
Convertible.....	445	345	368	380	450	249
Licensed Civil Air Personnel.						
Commercial pilots.....	5	474	405	414	380	320
Limited commercial pilots.....	6	6	6	6	65	129
Transport pilots.....	6	6	6	6	42	73
Private pilots.....	5	405	429	496	559	625
Air engineers.....	5	403	461	472	533	595
Unlicensed air mechanics employed.....	52	60	61	318	55	90

¹ Crews for 1935-37.² Passengers for 1935-37.³ Canadian postal contracts, 1,323,584 lb.⁴ Details of licensed aircraft for 1937 are given in Table 2.⁵ The basis of classification was changed

in 1935 and is now shown from 1933 onward. Figures on the old basis for 1929-34 will be found at p. 746 of the 1934-35 edition of the Year Book.

⁶ This class did not exist prior to 1936.

2.—Licensed Civil Aircraft in Canada, Dec. 31, 1937.

NOTE.—Dashes in this table indicate that no information was reported under the corresponding head for those years.

Aircraft.	Dominion and Provincial.	Private.	Flying Clubs.	Commercial.	Total.
	No.	No.	No.	No.	No.
GROSS WEIGHT.¹					
Up to 2,000 lb.....	39	95	71	111	316
2,001 to 4,000 lb.....	21	16	—	95	132
4,001 to 10,000 lb.....	17	3	—	127	147
Over 10,000 lb.....	—	—	—	9	9
Totals.....	77	114	71	342	604
TYPE.					
Sea boats.....	25	1	1	5	32
Amphibians.....	1	—	—	—	1
Land planes.....	34	99	68	121	322
Convertible ²	17	14	2	216	249
Totals.....	77	114	71	342	604

¹ Total weight of aircraft with supplies and full load.
skis as conditions demand.² May be equipped with wheels, floats or

Section 1.—History and Administration.

Subsection 1.—Development of Aviation in Canada.

Historical Sketch.—About the turn of the century Mr. W. R. Turnbull, who may be termed the "father of aeronautical research in Canada", was experimenting with aerofoils and propellers at Rothesay, New Brunswick, where, in 1902, he set up the first small wind tunnel in Canada. He discovered the laws of the centre of pressure movement on aerofoils, and made deductions from these laws which explained the longitudinal stability of aeroplanes. He also propounded the static laws of air propellers and in later years evolved and developed the controllable-pitch propeller.

At the time that Mr. Turnbull was beginning his work, Dr. Graham Bell was experimenting with kites and air-screws in laboratories at his summer home at

Baddeck, Cape Breton island. The "Aerial Experiment Association", formed in 1907, consisted of Dr. Bell, J. A. D. McCurdy and F. W. Baldwin, two young Canadian engineering graduates, Glen Curtiss, a motor-cycle engine builder from New York State, and Lieut. Selfridge, on leave from the United States army. As a result of the work of these associates, the first flight in Canada was made at Baddeck on Dec. 7, 1907, in the *Cygnets*, a tetrahedral kite, which was towed by a steam tug. On Feb. 23, 1909, McCurdy's aeroplane, the *Silver Dart*, was taken out for tests on the ice at Baddeck. With its designer as pilot and under its own power, it flew for half a mile, rising thirty feet above the ice. This was the first aeroplane flight by a British subject. The *Silver Dart* was an advance on any aircraft previously flown, notable features being a three-wheel undercarriage, tapered wings, and the use of aileron controls.

Progress was rapid throughout the civilized world in the development and design of heavier-than-air flying craft from 1908 to the outbreak of the War, and this progress was accelerated during the War by the intensity of competition for superiority in the air, and by the wide field for experiment which the war activities provided. Officially, Canada took little part in these developments. However, many young Canadians entered the flying service of Britain and, to facilitate their recruitment and preparation, training units were established in Canada. To provide the aircraft for training purposes, Canadian Aeroplanes, Limited, was organized by the Imperial Munitions Board and, by the end of the War no less than 2,900 planes had been built by this industry. In the latter part of the War, owing to the extension of submarine raiding to the Atlantic coast of America, a Royal Canadian Naval Air Service was organized to patrol the coasts of the Maritime Provinces and the gulf of St. Lawrence. Bases were established at Halifax and Sydney, and patrols inaugurated on Aug. 25, 1918.

At the end of the War thousands of young men with training and experience in the British flying services returned to Canada, full of enthusiasm for aviation, and seeking an opportunity to apply their new knowledge to peace-time developments. At the same time, governments were disposing of their surplus stocks of planes at bargain prices. Action was necessary to supervise and control aviation in Canada. The Air Board was appointed in June, 1919, with authority for the full regulation of civil aeronautics. Branches were organized to deal with licensing of aircraft and personnel, to conduct operations for other Government services, and to provide technical services.

The immediate post-war circumstances of a large number of trained pilots and many surplus aircraft resulted in great activity in flying. However, much of this was in the form of exhibition flying, joy-riding and flying instruction. Patronage of these activities soon waned as the novelty of flying wore off among the general public. However, the foundations for real progress were laid by a few more far-sighted men who sought to apply the facilities of aircraft to real practical purposes in forest reconnaissance, surveying, and transportation in inaccessible areas of country. In the summer of 1919 successful flights were made for forest protection and survey work at Lac à la Tortue in Quebec. In the summers of 1920 and 1921 bases were established by the Air Board, with provincial co-operation, at various points across Canada from which forest patrols and survey work were carried on. In addition some large corporations, such as the Laurentide Company and Price Brothers, established their own air services for forest patrol, surveys and transportation. The discovery of crude oil at Fort Norman on the Mackenzie river in the fall of 1921 led to the first large-scale attempt to establish air transportation in the far north by the Imperial Oil Company. As a result of the development of mining activity at Rouyn

in northwestern Quebec, the first regular freight and passenger air transport service was inaugurated in 1924 by the Laurentide Air Services, Limited.

From these beginnings the expansion has been rapid. The speed and ease of air transport played a very important part in the expansion of mining activity during recent years throughout many areas of the Canadian Shield. Aircraft have been regularly used all across Canada for forest sketching, patrol and fire suppression, while very large areas have been mapped each year by aerial photography. The basic reasons for this progress of flying in the north country are simple. The only alternative means of transportation in many cases—the canoe in summer and the dog team in winter—are arduous, tedious, very costly, and slow for long distances. Furthermore, the lakes which dot the country everywhere provided from the first readily available landing places for aircraft equipped with floats in summer and with skis in winter. The flying could all be done in daylight hours and trips could generally be postponed if weather conditions were unfavourable. As a result commercial flying throughout the north country has been able to supply a very real economic service and to show substantial progress without governmental subsidies of any kind, while numerous governmental functions are being carried out with increased efficiency and economy through the aid of flying.

The situation was wholly different in the older settled parts of Canada. Here other forms of dependable and efficient transportation were already in existence and in some phases over-developed. The only advantage flying could offer was a saving of time, and to effect this an elaborate system of ground facilities was necessary. On account of the expense entailed, the development of inter-city air transportation was left in abeyance at first until progress elsewhere would give a clearer indication of its success and value. However, the success of inter-city air services in Europe and the steady growth of the United States airway system led to a reconsideration of Canada's position in 1927. As a step in establishing a chain of airports across Canada and also to provide for the training of personnel, the flying-club movement was started with the offer of government grants and gifts of aircraft. Twenty-three flying clubs were established in the principal cities of Canada in 1928 and 1929. Aerodromes established by municipalities or by these flying clubs formed the nucleus for the Trans-Canada airway, the Dominion Government having to provide intermediate landing fields, especially through the Rocky mountains and across northern Ontario, and the weather-reporting, lighting, and radio services. (See pp. 713-714.)

Mention has already been made of the administration of aviation under the Air Board immediately after the War. At the beginning of 1923, in the unification of the defence forces under the Department of National Defence, the Air Board was abolished and the administration of aviation was placed under the new Department. At this period when both military and civil flying services were small and in the early stages of their development, the advantages of combining their administration in one department were manifest. However, the two functions inevitably developed along different lines, these differences applying both to types of aircraft and to training of personnel. With the growth of both military and civil flying, their administration in one department became less convenient and stability in the administration of aviation in the Dominion was finally reached in the autumn of 1936 by the complete separation of the military and civil functions, the latter being transferred to the new Department of Transport. Civil aviation has now become so important a part of the transportation facilities of Canada that it can best be administered by the Department which deals with railway, shipping, and highway services, to which aviation is complementary.

THE TRANS-CANADA AIRWAY.

Modern Airway Facilities.—The term 'airway' may be defined as the path of flight between two terminal airports on which have been installed permanent aids to air navigation. In North America a standard system of aids to air navigation has gradually been evolved. This is being closely adhered to in the construction and equipment of the Trans-Canada airway, and some of the most important characteristics should be mentioned. Essential features are efficient weather and radio services. Terminal airports, *i.e.*, those where regular stops are made, should be all-way and all-weather fields, having three or more hard-surfaced runways, at least 3,000 feet in length, fully lighted with electric airway beacons, floodlights, boundary lighting systems to define the runways, range and approach lights to indicate the path of flight to the paved landing strips, and obstruction lights to define obstacles that might interfere with the clear approach to the airport. At a distance of about three miles there should be a radio-beam station, by means of which the pilot is guided along the airway and brought directly over the airport at the proper altitude for landing.

A meteorological service is essential on every main airport. By means of two-way radio, aeroplanes in flight are given, every thirty minutes, the latest information on the weather, are controlled during their flight, given full information as to other aeroplanes flying in their vicinity, and advised when to land.

Present practice requires radio-beam and two-way communication stations along the airway at intervals of about 100 miles between the terminal airports. Adjacent to these and directly in the path of flight secondary aerodromes are constructed. These are not necessarily stopping points but they afford a safe landing in case of need. The number of such additional intermediate aerodromes considered necessary for safety varies with the type of country. In open, settled, farm lands, where there are no mountains and where the weather is normally fine, they may be dispensed with altogether or spaced at intervals of about fifty miles between the major airports. Owing to the nature of the climate and the difficult physical character of the terrain in the Rocky Mountain region and northern Ontario, where there are absolutely no alternative emergency landing places, the spacing averages about thirty miles. The Trans-Canada Airway when finally completed will consist of a chain of airports from 30 to 50 miles apart reaching from Halifax to Vancouver with 'feeder' lines at branches from larger cities on the main airway to neighbouring cities in the United States and into the Canadian North.

Major Divisions of the Trans-Canada Airway.—Natural conditions divide the Trans-Canada airway into four distinct regions—the Mountain region, from the Pacific coast to the foothills in Alberta; the Prairie region, stretching from the foothills to the Ontario boundary; the Laurentian area, extending through western Ontario as far as the Ottawa valley; and the Atlantic section, which takes in the settled areas in the basin of the Great Lakes, the Eastern Townships of Quebec, and the Maritimes.

The Prairie region obviously presented the simplest construction and operating problems. There, precipitation is light, visibility normally good, contour changes are gradual, and aerodrome sites requiring little development were obtainable everywhere. Airway surveys commenced on the prairie section in the summer of 1928, and aerodrome construction and lighting installation followed. By the end of 1929, a chain of lighted aerodromes from Winnipeg to Edmonton *via* Regina and Calgary had been prepared and a contract for the carriage of mails had been let to Canadian Airways by the Post Office Department. Actual flying operations started on Mar.

1, 1930, with the operation of a nightly service each way. Five radio-beam stations, constructed in 1931, increased the efficiency of the airway materially. This service continued in regular operation with satisfactory results till Mar. 31, 1932, when, for reasons of economy in all services, it was temporarily suspended. Although the operation of the trans-prairie service was stopped, the airway surveys then in hand in the mountains and in northern Ontario, Quebec, and the Maritime Provinces were continued with a view to the eventual completion of the system from coast to coast.

Progress of the Airway.—Preliminary development on practically all aerodromes west of Montreal is now completed and while further construction work is required on some of the key airports to bring them up to the high standard of construction required, the route may now be flown safely in daylight hours. The installation of the radio-beam and two-way radio systems is proceeding as deliveries of equipment can be obtained. The lighting program is also well in hand.

Regular operations from Vancouver to Winnipeg—the western half of the airway—were possible at the end of 1937, and the airway should be in shape for regular operation at all seasons of the year, both night and day, from Vancouver to Montreal by mid-summer, 1938. The Atlantic section, east of Montreal, is not so far advanced but by the close of another construction season this too should be ready for regular operation.

An Act creating a national operating company—Trans-Canada Air Lines—for the operation of the Trans-Canada system was passed by Parliament in 1937. Time is required to build up such an organization but already it is operating the Seattle-Vancouver air-mail service and using this service as a training ground. As aircraft now on order are delivered, Trans-Canada Air Lines will extend its operations until they include the whole system from coast to coast.

The increase in landing speed and the introduction of night and all-weather flying necessitate larger airports, with longer clear approaches and improved surfaces. Airports which were adequate five years ago no longer suffice. The Department of Transport is co-operating with the municipal authorities in all parts of the country to provide air terminals of the required standard and is giving generous assistance so that first-rate airports may be available at all the principal traffic centres.

TRANS-ATLANTIC AIR SERVICE.

The past decade has witnessed the creation of a world-wide system of communications by air. European air lines cover that continent with a network connecting all the principal centres and stretching out to the farthest confines of Africa, Asia, and Australasia. In North America, the United States airway system provides a similar network and has been extended to give rapid means of transportation to all points in Central and South America. The Pacific ocean has been spanned and South America connected with Europe. The only major trade route not yet regularly served by aircraft is the North Atlantic. This trade route is perhaps the most important in the world. It joins the greatest centres of population and industry of the Old and New Worlds. It is served by the most highly efficient transport and communication systems in the world and here, if anywhere, is to be found traffic of sufficient value and quantity to justify the establishment of a commercial air service. The great circle track, or shortest route joining these two great industrial districts, passes down the Rhine Valley, through northern France and Belgium, London, northern Ireland, the Straits of Belle Isle, Montreal, the valley of the St. Lawrence and thence to the Mississippi basin. The eastern and western terminals of the direct

Trans-Atlantic airway lie in the British Commonwealth and from the earliest days of aviation the Canadian Government has watched its development with growing interest. The length of the ocean crossing and the climatic difficulties have delayed the establishment of any regular service by this route, but, with the advance of aeronautical and radio science and meteorological services, these are being conquered.

At the invitation of the Government of Newfoundland, representatives of the Canadian and United Kingdom Governments visited St. John's, Newfoundland, in July, 1933, for a conference on trans-Atlantic flying. This conference was also attended by representatives of Imperial Airways and Pan American Airways. The result of this conference was close co-operation between the three Governments in certain preliminary surveys and meteorological studies.

An agreement for co-operation in the establishment of the Trans-Atlantic air service by the Governments of Canada, the United Kingdom, the Irish Free State, and Newfoundland was reached by representatives of these Governments in Ottawa in December, 1935. Since the friendly co-operation of United States interests, rather than the institution of a rival service, was highly desirable, at the close of the Ottawa Conference in December, 1935, the representatives of the Commonwealth Governments proceeded to Washington and an agreement was reached with representatives of the United States Government for their co-operation in the institution of a regular transatlantic air-mail, passenger, and express service. The practical results of these two conferences were the trial flights made by aircraft of Imperial Airways and Pan American Airways during the summer of 1937. Flying boats were used by both companies, Imperial Airways operating two of the new 'Empire' type, high wing monoplane boats, while Pan American Airways used the 'Clipper' flying boat, a type which had been successfully flown on their trans-Pacific service. The success of these trial flights inspires confidence that, in a relatively short time, commercial transatlantic services will be in operation.

Canada's share in the trial flights has been confined so far to the provision of seaplane bases, meteorological and radio services in Canada and, as regards the two services last named, in Newfoundland as well. Under the Ottawa Agreement, when the trial flights justify the establishment of a regular service, a joint operating company will be formed by Imperial Airways, Trans-Canada Air Lines and a company nominated by the Irish Free State for the permanent operation of the route. Negotiations are now proceeding between the three companies for the establishment at an early date of such a joint operating company.

Subsection 2.—Administration.

Civil aviation, previously administered by the Department of National Defence, is now a function of the Department of Transport, created in November, 1936.

The administrative duties under the Controller of Civil Aviation include the inspection and registration of aircraft and air harbours, the licensing of commercial and private air pilots, air engineers and air navigators. In addition to these duties, the location and construction of air routes and any matters connected with airship services are administered in this Branch.

Provincial Government Operations.—The Ontario Provincial Air Service owns 25 aircraft, which are operated by the province in the work of forest fire protection, transportation, air photography and sketching in northern Ontario. The Manitoba Government Air Service operated, in 1937, 6 aircraft on forest protection

in the province for the Forestry Branch. Work requiring the use of aircraft was carried out in other provinces by commercial operators on contract with the Provincial Governments concerned.

Royal Canadian Mounted Police.—Since the Royal Canadian Mounted Police took over the duties of the Preventive Service in 1932, aircraft have been utilized in the work on a wide scale, particularly along the coastal areas of the Maritime Provinces and in the lower St. Lawrence river. Such aircraft are equipped to maintain communication with the Preventive Service patrol vessels and also the land detachments, thereby enabling closest co-operation between all branches. Prior to 1937, this work had been performed by seaplanes provided by the Royal Canadian Air Force, who also furnished the pilots. During 1937 aircraft operations along the Atlantic seaboard in connection with Preventive Service work were carried out entirely by aircraft purchased by the Royal Canadian Mounted Police. Four DeHavilland twin-engine Dragonfly landplanes were purchased by the Force, three of which were operated from the base located at Moncton, N.B. Flying operations commenced July 9, 1937, and terminated for the season Oct. 31, 1937, during which time a total of 117 separate patrols were carried out, which involved a total of 350 hours flying time. No accident or other untoward incident occurred during these patrols.

Commercial Aviation.—During 1937 the principal activity of commercial aircraft operators in Canada was the carriage by air of passengers, freight, and mails to mining fields in the more remote parts of the Dominion. Their work also included forest fire patrols, timber cruising, air photography, flying instruction, advertising, short passenger flights, etc., in various parts of the country.

Air-Mail Services.—Regular air-mail services were established in December, 1927. Statistics of the air-mail services, showing routes operated, mileage flown, and mail carried during the fiscal year ended Mar. 31, 1937, may be found in Table 6, p. 736, under the part of this chapter dealing with the Post Office.

Encouragement of Aviation.—To encourage a more wide-spread interest and knowledge of aviation, the Department of National Defence, since 1928, has assisted by issuing light aeroplanes and making grants to each of the 22 flying clubs, *viz.*: Halifax, Cape Breton, Saint John, Montreal, Brant-Norfolk, Fort William, Hamilton, Kingston, London, Ottawa, St. Catharines, Toronto, Border Cities, Kitchener, Brandon, Winnipeg, Moose Jaw, Regina, Saskatoon, Calgary, Edmonton, and Vancouver. Many aerodromes have been established through this movement. Details of membership, aircraft, hangars, flights, etc., of flying clubs are shown separately in the tables.

Section 2.—Airports and Aircraft.

Subsection 1.—Ground Facilities.

The nucleus of the chain of aerodromes and ground facilities mentioned below, which will constitute the Trans-Canada airway, consists of municipal or flying-club airports adjacent to the larger urban centres. There are also numerous terminals from which commercial flying services operate, chiefly into the northerly mining regions. These different types of air harbours are indicated in Table 3.

A large air terminal has been built at St. Hubert, seven miles south of Montreal. Immigration, customs, and postal facilities are available. An aerodrome has also been constructed at Rimouski to expedite the dispatch and reception of trans-Atlantic mails.

3.—Air Harbours in Canada, 1936.

MUNICIPAL AIR HARBOURS.

Location.	Name of Aeroplane Club Using Harbour.	Landing Surface.	Capacity of Hangar.	Investment. ¹
			sq. ft.	\$
Nova Scotia—				
Halifax.....	Halifax Aero Club.....	Land.....	2,400	1,300
New Brunswick—				
Fredericton.....	(none)	Water.....	—	—
Moncton.....	(none)	Land.....	4,881	23,830
Saint John.....	Saint John Flying Club.....	Land.....	5,200	33,520
Quebec—				
Cap de la Madeleine.....	(none)	Land.....	—	—
Ontario—				
Brantford.....	Brant-Norfolk Aero Club....	Land.....	1,300	6,650
Fort William.....	Fort William Aero Club....	Land.....	2,400	975
Haileybury.....	(none)	Water.....	—	—
Hamilton.....	Hamilton Aero Club.....	Land.....	5,700	—
Kingston.....	Flying Club of Kingston.....	Land.....	7,500	3,500
Little Current.....	(none)	Land and Water....	—	75
Port Arthur.....	(none)	Water.....	—	—
Stratford.....	(none)	Land.....	—	15,000
Waterloo.....	Kitchener-Waterloo Flying Club.....	Land.....	5,000	1,600
Manitoba—				
Virden.....	(none)	Land.....	—	1,000
Winnipeg.....	Winnipeg Flying Club.....	Land.....	—	17,784
Saskatchewan—				
Moose Jaw.....	Moose Jaw Flying Club, Ltd.	Land.....	11,600	42,500
North Battleford.....	(none)	Land.....	4,392	9,400
Regina.....	Regina Flying Club.....	Land.....	12,000	150,000
Saskatoon.....	Saskatoon Flying Club.....	Land.....	—	36,127
Weyburn.....	(none)	Land.....	—	2,000
Yorkton.....	(none)	Land.....	—	5,000
Alberta—				
Calgary.....	Calgary Aero Club.....	Land.....	7,800	54,638
Cooking Lake.....	(none)	Land and Water....	—	20,658
Edmonton.....	Edmonton and Northern Alberta Aero Club.....	Land.....	8,000	165,070
Lethbridge.....	(none)	Land.....	—	—
Medicine Hat.....	(none)	Land.....	—	—
British Columbia—				
Cranbrook.....	(none)	Land.....	3,850	10,758
Fernie.....	(none)	Land.....	3,200	23,700
Grand Forks.....	(none)	Land.....	—	2,850
Trail.....	(none)	Land.....	—	—
Vancouver.....	Aero Club of British Columbia.....	Land and Water....	21,306	626,000
Vernon.....	(none)	Land.....	3,000	5,000
Williams Lake.....	(none)	Land.....	—	902
Totals, Municipal Air Harbours			109,529	1,259,837

OTHER AIR HARBOURS.

Kind.	Landing Surfaces.			
	Land Only.	Water Only.	Land and Water.	Total.
	No.	No.	No.	No.
Public.....	17	27	Nil	44
Public-auxiliary.....	2	Nil	Nil	2
Public-temporary.....	1	Nil	Nil	1
Dominion Government.....	Nil	3	1	4
Intermediate.....	30	Nil	Nil	30
Provincial.....	Nil	11	Nil	11
Private.....	13	16	Nil	29
Totals, Other Air Harbours	63	57	1	121
Totals, Municipal Air Harbours	28	3	3	34
Grand Totals	91	60	4	155

¹ Not included in investments shown in Table 4.² Information not available.

Subsection 2.—Aircraft.

The Manufacture of Aircraft.—An aircraft industry, to construct in Canada the aircraft and equipment required for aviation, is essential to the development of flying. Canadian Vickers was the pioneer firm in Canada. Several manufacturers are now producing original types especially suited to operation in Canada. Several aircraft manufacturers from England and the United States have formed branches in Canada for the assembly and service of their products. The list of aircraft manufacturers for 1937 includes the following: Canadian Car & Foundry Co. Ltd., Fort William, Ont.; Boeing Aircraft Co. of Canada Ltd., Vancouver, B.C.; DeHavilland Aircraft of Canada, Toronto, Ont.; Fleet Aircraft of Canada Ltd., Fort Erie, Ont.; Cub Aircraft Ltd., Hamilton, Ont.; National Car & Foundry Co. Ltd., Hamilton, Ont.; A. E. Link, Gananoque, Ont.; Canadian Vickers Ltd., Montreal, Que.; Fairchild Aircraft Ltd., Longueuil, Que.; Noorduynd Aircraft Ltd., Montreal, Que.; and Montreal Aircraft Industries, Ltd., Montreal, Que.

The following firms have established plants for the manufacture of landing gear designed to meet the needs of Canadian aviation: MacDonald Bros. Aircraft Ltd., Winnipeg, Man.; Elliott Bros., Sioux Lookout, Ont.; Aircraft Supplies Ltd., Winnipeg, Man.; Sachau Marine Works, Toronto, Ont.; S. W. Waggett, Toronto, Ont.; Rutherford Co. Ltd., Montreal, Que.; Ottawa Car Mfg. Co. Ltd., Ottawa, Ont.; and Alberta Motor Boat Co., Edmonton, Alta.

Aero engine factories are established for construction or assembly and service of their products as follows: Standard Machine Works, Winnipeg, Man.; Coates Ltd., Eboune, B.C.; Wells Air Transport Ltd., Eboune, B.C.; Canadian Airways Ltd., Winnipeg, Man.; DeHavilland Aircraft of Canada, Toronto, Ont.; Fleet Aircraft of Canada Ltd., Fort Erie, Ont.; Cub Aircraft Ltd., Hamilton, Ont.; Canada Car & Foundry Co. Ltd., Hamilton, Ont.; Aero Engines of Canada Ltd., Montreal, Que.; Canadian Pratt & Whitney Ltd., Longueuil, Que.; Canadian Wright Ltd., Montreal, Que.; Canadian Car & Foundry Co., Montreal, Que.; Armstrong-Siddeley Motors Ltd., Ottawa, Ont.; Aircraft Repair Ltd., Edmonton, Alta.; M. & C. Aviation Co. Ltd., Prince Albert, Sask.; Prairie Airways Ltd., Moose Jaw, Sask.; and Institute of Technology & Arts, Calgary, Alta.

Section 3.—Finances and Employees.

Investments.—The development of aviation requires a considerable outlay of capital not only for the provision and replacement of aircraft but also for the provision of landing fields or harbours, buildings, servicing shops, etc.

4.—Investment for Civil Aviation in Canada, 1936.

Item.	Flying Clubs.	Commercial.
	\$	\$
Land and buildings.....	14,204	561,198
Aircraft.....	47,018	2,742,469
Tools and equipment.....	2,788	275,404
Furniture and office appliances.....	1,690	35,837
Organization expenditures.....	1,479	1,017,312
Totals.....	67,179	4,632,220

Revenues and Expenses.—No statistics are available regarding expenditures on flying operations by the Dominion and Provincial Governments or by private individuals. Table 5 shows the revenues and expenditures of flying clubs and commercial flying organizations.

5.—Revenues and Expenses of Aviation in Canada, 1936.

Item.	Flying Clubs.	Commercial.
	\$	\$
Total operating revenues.....	198,401	2,501,242
Total operating expenses.....	182,325	2,390,019
Net operating revenues.....	16,076	111,223

Personnel and Employees.—The numbers of pilots and engineers holding licences under the Controller of Civil Aviation in 1937 were as follows: private pilots 625; commercial pilots 320; limited commercial pilots 129; transport pilots 73; and air engineers 595.

In Table 6 are shown employees and salaries and wages in flying clubs and commercial flying organizations in 1936.

6.—Employees and Salaries and Wages in Civil Aviation, in Canada, 1936.

Item.	Flying Clubs.	Commercial.
	No.	\$
Employees.....	67	548
Salaries and Wages.....	80,707	815,931

Section 4.—Traffic.

The freight carried by aircraft consisted largely of machinery, supplies, etc., for mines in the northern part of Quebec, Ontario and the western provinces and the Northwest Territories. Many of these mines are accessible only by canoe in the summer and dog team in the winter or by aircraft, and aircraft transportation will probably be the cheapest and most effective method of transportation during the life of a large number of these. The amount of freight and express carried by aircraft has grown steadily and rapidly, increasing from 2,372,467 pounds in 1931 to 26,226,260 pounds in 1937 exclusive of 12,836 pounds carried in international service. This is considerably more than was carried in any other country, the United States reporting 7,127,369 pounds for 1937. The activity in mining, particularly in gold mining, due to the increased price of gold, has been a large factor in this rapid growth of air transportation of freight and express. Much mail, not included in the mail carried under contract, is also carried into the mines by aircraft.

7.—Commercial Air Traffic in Canada,¹ by Provinces, 1937.

Province or Other Origin.	Passengers Taken On.	Freight Loaded.	Mail Loaded.
	No.	lb.	lb.
Prince Edward Island.....	630	549	126,460
Nova Scotia.....	613	250	—
New Brunswick.....	872	5,839	148,910
Quebec.....	33,539	3,375,560	186,611
Ontario.....	42,604	11,249,169	321,686
Manitoba.....	12,232	3,823,817	254,409
Saskatchewan.....	12,270	1,176,481	62,023
Alberta.....	5,464	2,399,635	109,153
British Columbia.....	8,165	509,782	40,848
Yukon and Northwest Territories.....	5,626	1,691,265	33,942
Foreign countries.....	5,075	11,873	127,171
Totals.....	127,090	24,244,220	1,411,213

¹ Includes international operations.

8.—Operations of Civil Aircraft in Canada, 1937 with Totals for 1935 and 1936.

Item.	1935 Total.	1936 Total.	Details.				Total.
			Dominion and Provincial Govern- ments.	Light Aero- plane Clubs.	Com- mercial.	Inter- national. ¹	
Clubs..... No.	—	—	—	22	—	—	22
Members—							
Flying..... “	—	—	—	1,194	—	—	1,194
Other..... “	—	—	—	1,189	—	—	1,189
Flights of aircraft.. “	153,211	160,014	11,009	51,400	136,311	3,814	202,534
Hours flown..... “	88,451	101,953	8,818	19,720	92,550	5,462	126,550
Miles flown..... No.	7,522,102	7,803,942	699,771	27,900 ²	9,136,626	762,333	10,626,630
Average duration of flight..... minutes.	34	38	48	23	41	86	37
Gasoline consumed. gal.	3	1,681,517	126,971	132,165	1,876,527	139,189	2,274,852
Lubricating oil con- sumed..... “	3	51,730	3,419	3,501	51,238	3,317	61,475
Crew carried..... No.	173,211	132,096	12,092	51,400	130,631	6,807	200,930
Paying passengers carried..... “	140,379	99,451	—	380	102,740	9,352	112,472
Non-paying passen- gers carried..... “	17,093	19,209	7,010	26,037	13,698	1,300	48,045
Totals, personnel carried..... “	330,683	250,756	19,102	77,817	247,069	17,459	361,447
Crew carried one mile..... “	7,522 102 ⁴	9,753,690	750,227	30,400 ²	12,036,281	1,362,578	14,179,486
Paying passengers carried one mile.. “	7,936,950 ⁵	8,724,790	—	26,600 ²	10,952,003	1,874,601	12,853,204
Non-paying passen- gers carried one mile..... “	—	1,381,146	455,497	3	1,101,708	280,463	1,837,668
Totals, personnel carried one mile. “	15,459,052	19,859,626	1,205,724	57,000 ²	24,089,992	3,517,642	28,870,358
Pupils given instruc- tion..... “	3	1,304	6	985	646	12	1,649
Freight and express carried..... lbs.	17,615,910	25,387,719	1,961,546	—	24,231,384	12,836	26,205,766
Mail—postal con- tracts..... “	1,126,084	1,161,069	—	—	1,221,869 ⁶	189,344	1,411,213 ⁷
Ton miles—freight and express..... No.	3	1,075,029	3	—	1,890,594	1,080	1,891,674
Ton miles—mail... “	3	89,588	—	—	93,801	18,612	112,413
Totals, ton miles. “	3	1,164,617	3	—	1,984,395	19,692	2,004,087
Square miles sketch- ed from aircraft.. “	3	962	Nil	—	14,474	—	14,474
Square miles photo- graphed—vertical “	3	6,472	427	—	10,700	—	11,127
Square miles photo- graphed—oblique “	3	156	20	—	3,850	—	3,870

¹ Flights between Canada and the United States.
⁴ Pilot miles.

² From Point to point only.

⁵ Crew and passenger miles.
⁶ Exclusive of 46,375 lbs. carried
on contract with means of transportation optional.

³ Not
⁷ Carried under Canadian Postal contracts—
1,323,584 lbs.

Some countries include in their statistics traffic between two foreign stations of companies incorporated in the reporting country. In Table 7 are shown separately statistics of companies operating regular routes between points in Canada and the United States. These statistics include only those of traffic between the two countries. The company operating between Montreal, Albany, and New York reported only the flights, passengers, and freight, etc., from and to Montreal. Consequently, it would be quite proper to add this international traffic to the strictly Canadian traffic.

The Northern Airways Company has a postal contract for mail in the north-west to be carried by any means feasible and on this contract 46,375 pounds not included in the official air-mail contracts was carried by aeroplane.

9.—Accidents Resulting from Aircraft in Flight in Canada, 1937.

Class of Flight.	Number of Accidents Resulting in—		Persons—			
	Death or Injury.	Property Damage Only.	Killed.		Injured.	
			Crew.	Passen- gers.	Crew.	Passen- gers.
COMMERCIAL SERVICES.						
With passengers, freight, mail.....	3	25	1	3 ¹	1	3
With crew only.....	1	19	Nil	Nil	1	Nil
Instruction.....	Nil	4	"	"	Nil	"
Totals.....	4	48	1	3 ¹	2	3
LIGHT AEROPLANE CLUBS.						
Instruction—student solo.....	1	8	1	Nil	Nil	Nil
Licensed pilot—solo.....	Nil	10	Nil	"	"	"
Licensed pilot with passenger.....	1	6	1	1	"	"
Totals.....	2	24	2	1	Nil	Nil
STATE AIRCRAFT.						
Forest protection.....	1	1	Nil	Nil	1	1
Exhibition and miscellaneous.....	Nil	1	"	"	Nil	Nil
Totals.....	1	2	Nil	Nil	1	1
Grand Totals.....	7	74	3	4	3	4

¹ Includes 1 bystander.

10.—Non-Flight Accidents in Connection with Civil Aviation in Canada, 1937.

Item.	Employees.		Other Persons.		Totals.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Commercial services.....	Nil	4	Nil	Nil	Nil	4
Light aeroplane clubs.....	"	Nil	"	"	"	Nil
State aircraft.....	"	"	"	"	"	"
Totals.....	Nil	4	Nil	Nil	Nil	4

Item.	Estimated Damage to Aircraft.	Other Damage and Expenses.
	\$	\$
Commercial services.....	142,534	1,330
Light aeroplane clubs.....	10,333	Nil
State aircraft.....	8,200	"
Totals.....	161,067	1,330

11.—Operation and Accident Averages in Commercial Aviation in Canada, 1937.

Item.	No.	Item.	No.
OPERATION AVERAGES.		ACCIDENT AVERAGES.	
Duration of flight.....hours	.699	Accidents per 1,000 aircraft flights.....No.	.381
Length of flight.....miles	68.00 ¹	Accidents per 1,000,000 aircraft miles....."	5.568
Paying passengers per flight.....No.	.75	Fatalities per 1,000 aircraft flights....."	.0239
Length of passenger journey.....miles	107.00 ¹	Fatalities per 1,000,000 aircraft miles....."	.428
Length of flights with freight.....miles	156.00 ¹	Passengers killed per 1,000,000 passenger miles....."	.1659
Aircraft miles per gallon of fuel.....No.	4.976	Passengers injured per 1,000,000 passenger miles....."	.2488
Aircraft miles per gallon of lubricating oil....."	182.16	Crew killed per 1,000,000 crew miles....."	.0831
		Crew injured per 1,000,000 crew miles....."	.1663

¹ Approximate.

PART VI.—WIRE COMMUNICATIONS.*

The statistics regarding communication by wire are classified under two sections—telegraphs and telephones.

Section 1.—Telegraphs.

The early history of telegraphic communication in Canada, given on p. 778 of the 1934-35 Year Book, is not repeated in this volume in order to economize space.

Dominion Government Telegraph Service.—This service is operated by the Telegraph Branch of the Department of Public Works. Its general object has been to furnish wire communication for outlying and sparsely settled districts where the amount of business is so small that commercial companies will not enter the field but where the public interests require that there should be communication. Thus these facilities include: telegraph and telephone services to scattered settlements around the coasts of Cape Breton island; cable services to Campobello, Grand Manan and other islands in the bay of Fundy, to Prince Edward Island, Magdalen islands and Anticosti island in the gulf of St. Lawrence; telegraph or telephone services along the north shore of the gulf of St. Lawrence from Quebec to the straits of Belle Isle; cable connections with Pelee and Manitoulin islands in Ontario; some lines to northern outlying districts in Saskatchewan; lines from Edmonton to the Athabaska and Peace River country in Alberta; telegraph or telephone communications around the coast of Vancouver Island and to fishing, lumbering, and mining settlements along the coast of the mainland of British Columbia, as well as to isolated mining centres in the interior; and finally the overland telegraph line to Dawson and other settlements in Yukon. Statistics of these services are included in the tables which follow.

1.—Summary Statistics of All Canadian Telegraphs, calendar years 1920-36.

Year.	Gross Revenue.	Operating Expenses.	Net Operating Revenue.	Pole Line Mileage.	Wire Mileage.	Em- ployees.	Offices.	Messages, Land.	Cable-grams. ¹	Money Trans-ferred.
	\$	\$	\$	miles.	miles.	No.	No.	No.	No.	\$
1920	11,337,428	9,589,982	1,747,446	52,393	238,866	7,508	4,825	15,589,711	1,162,204	7,045,661
1921	11,310,989	9,734,299	1,576,690	52,828	250,802	7,818	4,901	15,013,993	1,154,787	5,150,916
1922	11,018,762	9,846,425	1,172,337	53,096	262,343	8,500	4,762	15,271,410	1,182,053	4,404,407
1923	11,417,284	9,931,845	1,485,439	53,383	270,782	8,275	4,961	16,150,106	1,302,224	5,326,352
1924	10,930,020	9,603,620	1,326,400	54,742	268,632	8,909	4,945	15,460,811	1,448,894	6,428,080
1925	11,520,322	9,681,200	1,839,122	51,726	284,121	7,224 ²	4,664	14,460,988	1,557,285	6,680,595
1926	12,143,388	10,166,040	1,977,348	52,612	305,933	6,755 ²	4,801	14,934,683	1,769,513	7,790,127
1927	12,990,549	10,600,412	2,390,137	52,731	323,539	7,338 ²	4,885	15,564,067	1,970,683	9,241,864
1928	14,740,641	11,647,063	3,093,578	53,771	337,971	7,639 ²	4,909	16,857,220	2,279,293	9,776,090
1929	16,256,441	12,590,364	3,666,077	52,835	360,883	8,056 ²	4,766	18,029,973	2,086,549	11,295,857
1930	14,264,997	11,791,291	2,473,706	52,824	371,747	7,331 ²	4,661	15,558,224	2,053,059	10,213,475
1931	11,641,729	10,720,949	920,780	53,228	368,583	6,637 ²	4,474	13,200,193	1,784,787	7,475,928
1932	9,381,075	9,020,052	361,023	52,362	366,142	5,788 ²	4,248	10,519,433	1,514,321	4,698,660
1933	9,267,715	8,122,964	1,144,751	52,113 ²	365,489	5,263 ²	4,115	10,095,061	1,597,044	3,632,910
1934	9,972,627	8,436,144	1,536,483	52,406	366,706	5,624 ²	4,171	10,526,496	1,691,477	3,950,854
1935	9,741,394	8,416,329	1,028,155	53,034	365,518	5,903 ²	4,103	11,138,835	1,297,454	3,834,458
1936	10,378,873	8,710,349	1,363,156	52,907	363,180	6,064	4,121	12,735,186	1,391,903	4,296,738

¹ Excluding messages relayed to the United States.

² Excluding commission operators.

³ Revised since the publication of the 1937 Year Book.

Telegraph Systems.—The Canadian telegraph systems are composed of lines owned by the Dominion Government and by chartered railway and telegraph companies. The Canadian facilities, in proportion to population, are among the most extensive in the world, and are operated under considerable climatic and geographical disadvantages. In the operation of railways and in the receipt and dispatch of market and press reports, the service to the nation is invaluable.

* Revised by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch issues annual reports dealing with telegraph and telephone statistics, respectively, to which the reader is referred for more detailed information.

Table 2 gives figures of telegraph operation and line and wire mileage of various companies for the years 1932 to 1936. Statistics of the Halifax and Bermudas Cable Co., the Canadian Marconi Wireless Telegraph Co., and the Pacific Cable Board are not included.

2.—Statistics of Chartered Telegraph Companies for the calendar years 1932-36.

Company.	Year.	Miles of Line.	Miles of Wire.	Number of Messages. ¹	Number of Offices. ²
Canadian National Telegraph Co.....	1932	24,018	166,172	5,562,277	2,011
	1933	24,103	165,058	5,468,221	1,937
	1934	23,980	164,831	5,603,761	1,909
	1935	24,938	162,110	5,807,170	1,708
	1936	24,698	162,922	7,215,653	1,705
Canadian Pacific Railway Co.....	1932	17,490	175,720	4,402,696	1,394
	1933	17,477	176,423	4,202,188	1,390
	1934	17,439	177,800	4,439,425	1,474
	1935	17,471	176,430	4,803,265	1,582
	1936	17,604	173,341	4,946,247	1,613
Western Union.....	1932	1,184	9,368	"	"
	1933	1,185	9,390	"	"
	1934	1,185	9,390	"	"
	1935	1,098	9,387	"	1
	1936	1,086	9,362	"	1
Temiskaming and Northern Ont. Rly. Commission	1932	593	3,111	101,294	35
	1933	593	3,111	96,906	35
	1934	593	3,122	112,965	35
	1935	575	3,557	94,436	35
	1936	575	3,485	103,707	35
North American Telegraph Co., Ltd.....	1932	345 ⁴	445	57,571	16
	1933	345 ⁴	445	54,738	15
	1934	345 ⁴	445	57,030	15
	1935	345 ⁴	445	57,541	15
	1936	345 ⁴	445	60,686	15
Northern Alberta Rly.....	1935	926	2,262	16,569	40
	1936	926	2,262	42,612	40
Dominion Government Telegraph Service.....	1932	9,077	11,316	336,256	756
	1933	8,844	11,052	254,910	703
	1934	8,864	11,108	299,869	705
	1935	8,884	11,327	324,721	688
	1936	8,893	11,363	328,866	679

¹ Cablegrams not included.

² The figures for Table 1 include offices of wireless and cable companies and to that extent are larger than the sums of the items given here for corresponding years.

³ Included with Canadian National. The Western Union handles only through business.

⁴ Leased telephone line.

Submarine Cables.—Sixteen transoceanic cables have termini in Canada—fourteen of them on the Atlantic coast and two on the Pacific. In addition there are eight cables between Atlantic coastal stations in Canada and the United States. The year in which the cable was first demonstrated to be of commercial value was 1866, and up to the present its use has greatly increased. The Atlantic cables are controlled by English and United States interests. The Pacific cable, from Canada to Australia and New Zealand, has been in operation since 1902, and was owned by a partnership of the Governments of Great Britain, New Zealand, Australia, and Canada. As a result of the recommendation of the Imperial Wireless and Cable Conference of 1928, in view of increased wireless competition, it was decided to dispose of the Pacific and West Indian Islands cable systems to the Imperial and International Communication Co., a company formed to take over all Empire-owned cables and lease the Empire-owned beam wireless systems. The necessary legislation was passed by the United Kingdom in February, 1929, and by Canada in June, 1929.

Section 2.—Telephones.

A brief historical account of the early development of telephones in Canada appeared at p. 781 of the 1934-35 Year Book.

Subsection 1.—Systems and Equipment.

Telephone Systems.—The 3,063 telephone systems existing in 1936 included the three large provincial systems in Manitoba, Saskatchewan, and Alberta, and a smaller governmental system in Ontario, together with the system operated by the National Parks of Canada, Department of Mines and Resources. There were also 143 municipal systems, the largest operated by the cities of Edmonton, Fort William, and Port Arthur. Out of the 1,901 co-operative telephone companies, no fewer than 1,153 were in Saskatchewan alone, 419 in Alberta, and 206 in Nova Scotia. The largest among the 772 joint-stock companies operating telephone systems in 1936 were the Bell Telephone Co., and the British Columbia Telephone Co. Almost 58 p.c. of the total telephone investment in Canada belonged to the Bell Telephone Co., and their telephones in Quebec and Ontario constituted 56 p.c. of the total for Canada.

Telephone Equipment.—The number of telephones per capita is second only to that of the United States, the numbers being 13·69 telephones per 100 population in the United States and 11·5 in Canada. This is a favourable showing in view of the low density of population in Canada as a whole and the fact that 46 p.c. (46·30 p.c. in 1931) of the population is rural.

There were 546,887 telephones out of a total of 829,078 in 51 leading cities of Canada operated from automatic switchboards; the remainder, or 282,191, were operated from manual switchboards. Automatic switchboards have completely displaced manual switchboards in the principal cities of the Prairie Provinces and are displacing them in the other provinces.

3.—Telephones in Use, Classified by Business, Residential, Rural and Public Pay, Mileages of Wire and Pole Line, 1911-36.

Year.	Sys-tems.	Pole-Line Mileage.	Mileage of Wire.	Telephones in Use.					
				Business.	Resi- dential.	Rural. ¹	Public Pay.	Total.	Per 100 Popu- lation.
	No.	miles.	miles.	No.	No.	No.	No.	No.	No.
1911.....	537	-	687,782	-	-	-	-	302,759	4·2
1912.....	683	-	889,572	-	-	-	-	370,884	5·0
1913.....	1,075	-	1,092,587	-	-	-	-	463,671	6·2
1914.....	1,136	-	1,343,090	-	-	-	-	521,144	6·8
1915.....	1,396	-	1,452,360	-	-	-	-	533,090	6·8
1916.....	1,592	-	1,600,564	-	-	-	-	548,421	6·8
1917.....	1,695	-	1,708,203	-	-	-	-	604,136	7·4
1918.....	2,007	-	1,848,466	-	-	-	-	662,330	8·0
1919 ²	2,219	-	2,105,240	-	-	-	-	778,758	9·2
1920.....	2,327	161,270 ³	2,105,101	260,481 ³	390,930 ³	204,855 ³	-	856,266	9·9
1921.....	2,365	179,093	2,268,271	273,498	396,384	232,208	-	902,090	10·3
1922.....	2,387	184,147	2,396,805	281,535	414,887	247,607	-	944,029	10·6
1923.....	2,459	188,408	2,574,083	303,660	444,300	261,360	-	1,009,320	11·1
1924.....	2,466	193,399	2,765,722	281,108	509,928	265,509	15,909 ³	1,072,544	11·6
1925.....	2,495	194,370	3,020,773	297,875	556,837	268,807	-	1,142,876	12·2
1926.....	2,479	201,604	3,306,214	311,557	597,429	270,686	21,336	1,201,008	12·8
1927.....	2,462	204,245	3,591,035	324,425	637,536	275,544	22,482	1,259,987	13·2
1928.....	2,447	207,566	3,982,867	345,771	684,820	280,878	23,065	1,334,534	13·8
1929.....	2,415	220,525	4,486,213	366,418	724,001	269,487	22,916	1,382,822	14·1
1930.....	2,414	222,113	4,790,224	373,387	740,050	264,681	24,743	1,402,861	14·1
1931.....	2,399	222,196	4,985,076	369,281	723,868	245,485	25,566	1,364,200	13·1
1932.....	2,414	220,459	5,089,261	351,509	663,815	220,680	25,241	1,261,245	12·0
1933.....	2,403	219,753	5,134,871	341,063	617,532	209,611	24,124	1,192,330	11·2
1934.....	2,388	208,131	5,133,521	349,892	605,206	217,182	24,749	1,197,029	11·1
1935.....	2,833	207,916	5,120,610	351,427	615,052	218,818	23,518	1,208,815	11·1
1936.....	3,063	210,926	5,197,042	371,401	641,229	229,940	23,658	1,266,228	11·5

¹ Includes telephones on rural exchange lines and urban exchange lines which have more than four parties. ² Figures for 1911-18 are for years ended June 30; those since 1918 are for calendar years.

³ First year reported.

The density of telephones in the different provinces is naturally influenced by the urbanization of the population because the number of telephones used for business purposes is much greater in cities and towns than in rural areas.

4.—Telephones in Use, by Provinces, Dec. 31, 1936.

Province.	On Individual Lines.		On 2- and 4-Party Lines.		On Rural Lines.		Private Branch Exchange and Extensions.		Public Pay Station.	Total.	Telephones per 100 Population.
	Busi-ness.	Resi-dence.	Busi-ness.	Resi-dence.	Busi-ness.	Resi-dence.	Busi-ness.	Resi-dence.			
	No.	No.	No.	No.	No.	No.	No.	No.			
P.E.I.....	713	912	134	587	164	2,231	421	83	72	5,317	5.8
N.S.....	5,913	11,717	621	8,290	917	9,640	5,069	1,968	1,010	45,145	8.4
N.B.....	4,055	6,683	782	7,152	830	5,393	4,009	1,161	702	30,767	7.1
Que.....	39,312	69,702	3,983	65,305	3,596	22,761	51,934	11,439	7,416	275,448	8.9
Ont.....	68,519	125,380	7,149	158,070	4,471	93,942	82,084	25,784	10,665	576,064	15.6
Man.....	9,114	25,063	72	3,618	31	12,324	11,105	1,528	2,033	64,888	9.1
Sask.....	11,570	17,131	Nil	379	3	44,589	4,896	536	316	79,420	8.5
Alta.....	12,189	26,324	8	7	552	13,880	9,174	487	147	62,768	8.1
B.C.....	17,461	10,191	500	57,628	1,612	12,985	20,576	4,023	1,297	126,273	16.8
Yukon....	38	9	Nil	72	Nil	19	Nil	Nil	Nil	138	3.4
Totals....	168,884	293,112	13,249	301,108	12,176	217,764	189,268	47,009	23,658	1,266,328	11.5

Subsection 2.—Telephone Finances.

The financial statistics of Table 5 show that the investment in telephone property in Canada, represented by the cost of property, is a very large item and is exceeded in the field of transportation and communications only by the investments in steam railways (pp. 645-646) and roads and highways (pp. 674-675).

5.—Summary Financial Statistics of Telephones in Canada, 1911-36.

Year.	Capitalization.		Cost of Property.	Gross Revenue.	Operating Expenses.	Net Operating Revenue.	Salaries and Wages. ¹	Em- ployees. ²
	Capital Stock.	Funded Debt.						
	\$	\$	\$	\$	\$	\$	\$	No.
1911.....	21,527,375	18,516,608	34,737,530	10,068,220	6,979,045	3,089,175	915,636	10,425
1912.....	21,533,605	24,743,247	56,887,799	12,273,627	9,094,689	3,178,938	2,659,642	12,783
1913.....	26,590,501	33,256,503	69,214,971	14,897,278	11,175,689	3,721,589	6,839,399	12,867
1914.....	28,644,340	41,647,554	80,258,356	17,297,269	12,882,402	4,414,867	8,250,253	16,799
1915.....	28,947,122	45,337,869	83,792,583	17,601,673	12,836,715	6,764,958	8,357,029	15,072
1916.....	29,416,956	47,503,358	88,520,020	18,594,268	11,147,201	7,447,067	7,852,719	15,247
1917.....	29,476,367	49,645,335	94,469,534	20,122,282	12,095,426	8,026,856	8,882,593	16,490
1918.....	29,803,090	55,471,601	104,368,628	22,753,274	13,644,518	9,108,756	10,410,807	17,336
1919 ³	35,227,233	65,360,600	125,017,222	29,401,006	20,081,436	9,319,570	15,774,586	20,491
1920.....	36,149,838	80,539,367	144,560,969	33,473,712	28,044,401	5,429,311	17,294,405	21,137
1921.....	42,194,426	90,343,345	158,678,229	36,986,913	30,080,035	6,906,878	19,000,422	19,943
1922.....	48,968,198	94,833,825	167,332,932	39,559,149	29,966,181	9,592,968	17,305,759	19,321
1923.....	57,366,675	95,306,347	179,002,152	42,656,655	32,390,370	10,266,285	18,182,429	21,002
1924.....	63,798,133	96,216,887	193,884,378	44,322,598	33,615,686	10,706,912	18,293,234	21,685
1925.....	65,514,130	102,653,161	210,535,795	47,233,617	35,566,947	11,666,670	19,106,383	21,831
1926.....	68,345,999	110,805,099	227,155,900	50,522,859	38,141,360	12,381,499	25,219,493	23,083
1927.....	76,460,540	115,981,955	243,999,135	56,907,338	48,561,916	8,345,422	26,254,605	23,437
1928.....	85,913,239	121,528,627	263,201,651	61,791,333	51,542,544	10,248,789	28,501,378	24,373
1929.....	93,737,979	141,205,328	291,589,148	65,240,610	56,559,517	8,681,093	31,672,277	27,459
1930.....	102,777,267	155,411,716	319,101,191	69,420,459	61,886,340	7,534,119	32,085,948	26,575
1931.....	105,765,685	168,224,084	333,055,119	66,806,580	60,067,016	6,739,564	28,493,252	23,825
1932.....	106,161,477	172,158,977	333,169,486	60,684,992	55,344,023	5,340,969	24,115,545	21,354
1933.....	106,336,079	165,229,197	330,490,878	56,062,970	50,423,641	5,639,329	21,276,406	18,796
1934.....	108,638,326	162,660,037	331,187,227	57,380,171	50,980,088	6,391,083	21,167,834	17,291
1935.....	109,776,507	159,785,965	327,754,026	57,029,918	50,889,780	6,140,138	22,283,362	17,414
1936.....	111,239,775	160,331,601	330,048,263	59,770,591	51,938,102	7,832,489	23,365,977	17,775

¹ Includes salaries and wages chargeable to capital account.
lines in Saskatchewan.

² Excluding employees on rural lines in Saskatchewan.
³ Years ended June 30, 1911-18, and calendar years 1919-35.

6.—Financial Statistics of Telephones in Canada, by Provinces, 1936.

Province.	Capital Liability.	Cost of Property.	Gross Revenues.	Operating Expenses.	Net Operating Revenues.	Salaries and Wages.	Em- ployees.
	\$	\$	\$	\$	\$	\$	No.
P.E. Island....	1,012,667	1,006,658	195,725	143,665	52,060	61,405	81
Nova Scotia....	8,417,824	10,605,323	1,908,081	1,131,812	776,269	683,902	749
New Brunswick	5,851,628	6,968,004	1,329,337	869,311	460,026	507,741	527
Quebec.....	157,185,471 ¹	70,496,877 ¹	39,237,479 ¹	27,060,438 ¹	12,177,041 ¹	6,058,417	4,089
Ontario.....	6,470,765	137,815,129	2,222,642	1,711,464	511,178	10,215,177	7,141
Manitoba.....	20,886,554	22,764,040	2,937,435	1,810,278	1,127,157	1,393,850	1,047
Saskatchewan..	19,556,357	33,223,982	3,238,066	2,601,280	636,786	811,291 ²	640 ²
Alberta.....	30,070,199	18,761,752	3,135,812	1,463,735	1,672,077	1,029,727	1,120
British Colum- bia.....	22,033,195	28,351,257	5,548,881	3,697,517	1,851,364	2,594,615	2,374
Yukon.....	86,716	55,241	17,133	17,453	-320	9,852	7
Totals.....	271,571,376	330,048,263	59,770,591	40,506,953	19,263,638	23,365,977	17,775

¹ Includes Bell Telephone in Ontario and Quebec.² Excludes rural lines.**Subsection 3.—Telephone Calls.**

Systems operating almost 90 p.c. of all telephones in Canada made estimates by actual count on days of normal business, and, after adjusting for uncompleted calls, holidays, Sundays, etc., the average was multiplied by 365. The long-distance calls in practically all cases were the actual long-distance calls put through or completed. The averages were 1,912 local and 22.1 long-distance calls per telephone and 222 telephone conversations per capita. The estimated per capita average for the United States in 1935 was 197.

7.—Local and Long-Distance Calls and Averages per Telephone and per Capita, calendar years 1928-36.

Year.	Local Calls.	Long-Distance Calls.	Total Calls.	Averages per Telephone.			Total Calls per Capita. ¹
				Local.	Long-Distance.	Total.	
	No.	No.	No.	No.	No.	No.	No.
1928.....	2,184,686,000	36,177,000	2,220,863,000	1,637	27.1	1,664	226
1929.....	2,425,019,000	37,852,000	2,462,871,000	1,754	27.4	1,781	246
1930.....	2,475,823,000	37,497,000	2,512,820,000	1,764	26.7	1,791	246
1931.....	2,421,081,000	33,198,000	2,454,279,000	1,775	24.3	1,799	236
1932.....	2,319,354,000	27,219,000	2,346,573,000	1,839	21.6	1,861	223
1933.....	2,247,144,000	24,437,000	2,271,581,000	1,885	20.5	1,905	213
1934.....	2,278,864,000	25,396,000	2,304,260,000	1,904	21.2	1,925	213
1935.....	2,270,219,000	26,019,000	2,296,238,000	1,878	21.5	1,900	211
1936.....	2,421,202,000	27,990,000	2,449,192,000	1,912	22.1	1,934	222

¹ Per capita figures are based on official estimates of population given on p. 155.

PART VII.—WIRELESS COMMUNICATIONS.*

Under the Radiotelegraph Act (c. 195, R.S.C. 1927) the administration of radio within the Dominion is vested in the Minister of Transport.

Section 1.—Radio-telegraphy.

The Coast Station Radio-telegraph System.—The present coast station system of 81 stations consists of three chains—one extending from Vancouver to Prince Rupert on the Pacific, another from Port Arthur to the Atlantic ocean in the East, and the third from Port Churchill to Resolution island at the entrance to Hudson strait. The Great Lakes coast stations connect with those of the east coast, which, in turn, connect with the Hudson Bay route chain. There is no direct radio connection between the Great Lakes and the Pacific Coast chain.

Of the above stations, 14 on the east coast and Great Lakes are operated by the Canadian Marconi Co. under contract with the Department, and the remaining 67 on the east coast, west coast, and Hudson bay and strait are operated directly by the Department. Twice daily, at advertised hours, a number of these stations broadcast messages to shipping containing such important information as weather forecasts, storm warnings, reports in connection with floating derelicts, ice, and other dangers to navigation. In the interests of navigators, to whom accurate time is essential in computing observations on celestial bodies, one Canadian coast station transmits time signals at advertised hours daily.

Some years ago the discrimination of underwriters in the matter of insurance rates charged on ships plying to Canadian ports led the Department to feel that any reasonable expenditure which would tend to reduce these charges would be a sound investment. To this end 13 direction-finding stations have been established at specially selected sites with respect to navigational routes—7 on the east coast, 5 on Hudson bay and strait, and 1 on the west coast. These stations are fitted with special apparatus which enables the direction of the incoming radio signal transmitted by a ship to be accurately determined.

A network of 28 radio beacon stations (including one combined direction-finding and beacon station and one combined coast and beacon station) is maintained on the Atlantic and Pacific coasts and on the Great Lakes to enable a ship or aircraft equipped with its own direction-finding apparatus to determine its bearing or direction in relation to the radio beacon station. The operation of these radio beacons is automatic, the transmissions being made in clear weather hourly or half-hourly as advertised, and continuously during foggy weather. At Point Atkinson, B.C., the signals of the radio beacon are synchronized with the emissions of the fog alarm at that place during foggy weather for distance finding. To insure the safety of life at sea, all passenger steamers and freighters plying to and from Canadian ports must carry radio equipment manned by competent operators in possession of a certificate of proficiency in radio. The Department maintains a complete radio inspection service to enforce this regulation. Inspectors located at various ports throughout the Dominion are responsible for checking the efficiency of the radio equipment on ships of all nationalities, and seeing that only competent operators are carried. Ships are also surveyed with a view to the issuance of the necessary certificates prescribed under the Safety of Life at Sea and Load Line Conventions Act, 1931. Examinations for certificates of proficiency in radio are conducted by the Radio Division, and 7,006 certificates had been issued up to Mar. 31, 1937.

*Section 1 and Subsection 1 of Section 2 have been revised by Commander C. P. Edwards, O.B.E., Chief of Air Services, Department of Transport, Ottawa. A fuller treatment of the historical and descriptive background of radio communication was published at pp. 607-610 of the 1932 Year Book.

1.—Government-Owned Radio Stations in Canada, fiscal year ended Mar. 31, 1937.

NOTE.—Of these Government-owned stations some only are operated by the Government. The rest are operated by the Marconi Co. and are indicated by asterisks (*).

Name of Station.	Situation.	Name of Station.	Situation.
East Coast.		Hudson Bay and Hudson Strait.	
Belle Isle ¹	Belle Isle Straits, Nfld.	Cape Hopes Advance ¹	Hudson Strait, Que.
Canso ¹	Nova Scotia.	Nottingham Island ¹	Hudson Strait, N.W.T.
Cape Race ¹	Newfoundland.	Port Churchill ¹	Hudson Bay, Man.
Camperdown ¹	Entrance Halifax Harbour N.S.	Resolution Island ¹	Hudson Strait, N.W.T.
Clarke City.....	Gulf of St. Lawrence, Que.	Chesterfield Inlet ¹	Hudson Bay, N.W.T.
Fame Point*.....	" " "	DIRECTION-FINDING STATIONS.	
Father Point*.....	" " "	Cape Hopes Advance.....	Hudson Strait, Que.
Grindstone Island*.....	Magdalen Islands, Que.	Nottingham Island.....	Hudson Strait, N.W.T.
Halifax Dockyard.....	Halifax, N.S.	Port Churchill.....	Hudson Bay, Man.
Montreal*.....	St. Lawrence River, Que.	Resolution Island.....	Hudson Strait, N.W.T.
North Sydney*.....	Cape Breton, N.S.	Chesterfield Inlet.....	Hudson Bay, N.W.T.
Point Amour*.....	Gulf of St. Lawrence, Que.	Other Northwest Territories.	
Quebec*.....	St. Lawrence River, Que.	Coppermine.....	Coronation Gulf.
Saint John.....	Red Head, N.B.	West Coast.	
Yarmouth.....	S.E. of Nova Scotia.	Alert Bay.....	Cormorant Island, B.C.
DIRECTION-FINDING STATIONS.		Bull Harbour.....	Hope Island, Vancouver Is.
Belle Isle D/F.....	Belle Isle Straits, Que.	Cape Lazo.....	Straits of Georgia, near Comox, B.C.
Canso D/F.....	Nova Scotia.	Dead Tree Point ²	South of Graham Island, Queen Charlotte Is., B.C.
Cape Race D/F.....	Newfoundland.	Digby Island.....	Entrance Prince Rupert Harbour, B.C.
Camperdown D/F.....	Entrance Halifax Harbour, N.S.	Estevan.....	West Coast, Vancouver Is.
Saint John D/F.....	Red Head, N.B.	Gonzales Hill.....	Victoria, B.C.
Saint Paul D/F. ²	Cabot Strait, N.S.	Merry Island.....	British Columbia.
Yarmouth D/F.....	Nova Scotia.	Pachena Point ¹	West Coast, Vancouver Is.
RADIO BEACON STATIONS.		Vancouver (VAI).....	Entrance Vancouver Harbour, B.C.
Cape Whittle.....	Gulf of St. Lawrence, Que.	Vancouver (VAB).....	Merchants Exchange, Vancouver, B.C.
East Point.....	Prince Edward Island.	DIRECTION-FINDING STATIONS.	
West Point.....	Anticosti.	Pachena Point D/F.....	West Coast, Vancouver Is.
Pointe des Monts.....	Gulf of St. Lawrence, Que.	RADIO BEACON STATIONS.	
Perroquet Island.....	" " "	Point Atkinson.....	Burrard Inlet, B.C.
Natashquan Point.....	" " "	Race Rocks.....	Near Victoria, B.C.
Cape Bauld.....	Newfoundland (N.W.)	Langara.....	Langara Island, Queen Charlotte Is., B.C.
Cape Ray.....	Newfoundland (S.W.)	Dead Tree Point.....	South of Graham Island, Queen Charlotte Is., B.C.
Heath Point.....	Anticosti, Que.	Quatsino.....	West Coast, Vancouver Is. (Kains Is.).
Lurcheur Lightship.....	Off Yarmouth, N.S.	Triple Island.....	Triple Islets Group, B.C.
Sable Island.....	North Atlantic.	LIFE-SAVING STATIONS.	
Sambro Lightship.....	Off Halifax, N.S.	Banfield.....	West Coast, Vancouver Is.
Seal Island.....	S.E. of Nova Scotia.	Carmanah.....	" "
Saint Paul.....	Cabot Strait N.S.	Cape Beale.....	" "
Western Head.....	Near Liverpool, N.S.	Pachena.....	" "
LIFE-SAVING STATIONS.		Tofino.....	" "
Grindstone.....	Gulf of St. Lawrence, Que.	Lennard Island.....	" "
Bird Rocks.....	" " "		
Little Wood Island.....	Bay of Fundy, N.B.		
Gannet Rock.....	" " "		
Great Lakes.			
Kingston*.....	Barrie/field Common, Ont.		
Midland*.....	Georgian Bay, Ont.		
Point Edward*.....	Lake Huron, Ont.		
Port Arthur*.....	Port Arthur, Ont.		
Port Burwell*.....	Lake Erie, Ont.		
Sault Ste. Marie*.....	Sault Ste. Marie, Ont.		
Tobermory.....	Entrance Georgian Bay, Ont.		
Toronto*.....	Toronto Island, Ont.		
RADIO BEACON STATIONS.			
Southeast Shoal.....	Lake Erie, Ont.		
Main Duck.....	Lake Ontario, Ont.		
Long Point.....	Lake Erie, Ont.		
Michipicoten Island.....	Lake Superior, Ont.		
Cove Island.....	Lake Huron, Ont.		
Slate Island.....	Lake Superior, Ont.		
Port Weller.....	Lake Ontario, Ont.		

¹ This is the same station as that listed under Direction-Finding Stations, but is included under the two headings to indicate its dual function. It is counted only as a D/F station in the summary in Table 3.

² Also included under Radio Beacon Stations to show its double function.

In 1937, Government radio-telegraph stations on the east coast, west coast, the Great Lakes, and Hudson bay and strait handled 452,031 messages or 7,872,891 words compared with 342,587 messages or 7,712,803 words handled in 1936. In 1937, the cost of maintenance was \$474,805 compared with \$466,198 in the previous year.

Section 2.—Radio-telephony.

Broadcasting of the human voice by radio first commenced in Canada with test programs carried out by the Canadian Marconi Co. in Montreal during the winter evenings of 1919. Regular organized programs were commenced in December, 1920, by the same company, on a wavelength of 1,200 metres. In April, 1922, the establishment of broadcasting stations on a general scale commenced, 52 private, commercial and amateur broadcasting licences being granted during the fiscal year 1923. A radio-telephone service between Canada and Great Britain was first made available to the Canadian public, through the medium of the Bell Telephone Co. *via* the transatlantic radio circuit operated by the American Telegraph and Telephone Co. from New York, in March, 1928. In 1932, a direct circuit with Great Britain was opened through the beam station of the Canadian Marconi Co. at Drummondville, Quebec.

Subsection 1.—Regulation of Radio-telephony.

As explained on p. 727, the administration of radio, including broadcasting, in Canada is vested in the Dominion Department of Transport. All stations must be licensed; the fee for a broadcasting station is \$50 per annum, and for a receiving set, \$2 per annum.*

Approximately \$200,000 is expended annually by the Radio Division of the Department of Transport for the suppression of inductive interference in the interests of broadcast listeners. This service is entirely free.

The extent to which private receiving sets are used for the reception of public broadcasting is indicated by the number of private receiving licences issued in the various provinces of the Dominion during the fiscal year 1937 as follows: Prince Edward Island, 3,282; Nova Scotia, 40,938; New Brunswick, 27,253; Quebec, 240,105; Ontario, 424,126; Manitoba, 69,861; Saskatchewan, 68,193; Alberta, 72,458; British Columbia, 91,978; Yukon and Northwest Territories, 306.

*Increased to \$2.50 per annum as from Apr. 1, 1938, by an Order in Council of Jan. 21, 1938, under authority of the Radiotelegraph Act (c. 197, R.S.C. 1927).

2.—Wireless and Radio Stations in Operation in Canada, Mar. 31, 1933-37.

Class of Station.	1933.	1934.	1935.	1936.	1937.
	No.	No.	No.	No.	No.
Coast stations (Government-owned).....	31	30	32	31	31
Direction-finding stations (Government-owned).....	12	13	13	13	13
Ship stations (Government-owned).....	49	53	55	56	58
Radio beacon stations (Government-owned).....	20	20	21	24	26
Radiophone stations (Government-owned).....	5	5	9	9	10
Land stations.....	1	1	1	1	1
Ship stations (commercial).....	224	215	217	212	261
Limited coast stations.....	3	4	4	5	5
Public commercial stations.....	30	22	26	36	41
Private commercial stations.....	122	162	210	275	315
Private commercial broadcasting stations.....	70	68	74	78	80
Experimental stations.....	110	92	99	82	126
Amateur experimental stations.....	1,229	1,606	2,012	2,380	2,821
Amateur broadcasting stations ¹	7	6	2	Nil	Nil
Experimental short-wave broadcasting stations.....	Nil	Nil	9	10	8
Private receiving stations ²	761,288	707,625	812,335	862,109	1,038,500
Radio training schools.....	4	4	4	6	5
Licensed aircraft.....	2	2	1	4	7
Totals.....	763,207	709,928	815,124	865,331	1,042,308

¹ This class of station discontinued Apr. 1, 1935. ² Includes licences issued free to the blind, numbering 2,758 in 1937, 2,314 in 1936, 1,931 in 1935, 1,517 in 1934, and 1,202 in 1933.

Subsection 2.—Canadian Broadcasting Corporation.

National radio broadcasting in Canada entered a second phase on Nov. 2, 1936, when the Canadian Broadcasting Corporation replaced the Canadian Radio Broadcasting Commission. Notable progress was made during 1937 toward improvement in broadcast coverage, reception, and program service.

The most important technical developments were the inauguration of two 50,000-watt transmitting stations, CBF, at Verchères, Que., to serve the province of Quebec, and CBL, Hornby, Ont., to serve the province of Ontario. These have vastly improved the service in those areas and form the nucleus of a chain of such stations ultimately to be placed at strategic points throughout the country.

Care has been given to improving announcing standards, and a special department has been created to deal with this. Reference libraries have been established and a comprehensive handbook for announcers has been published. A guide to the pronunciation of Canadian place names is at present in preparation. This service is available without cost to any private station.

A successful experiment was conducted in the Spring of 1938 when certain Canadian universities were invited to put on programs of undergraduate and student talent. These programs were very well received and it is proposed to continue them from other universities. They provide an excellent field for the discovery of new artistic talent.

A talks department was established during 1937 and a wide variety of informative and popular talks have since been planned and presented. Subjects range from nature study, book reviews, discussions on poetry, history, and science, to stories of travel and adventure. Balanced controversy has been encouraged. Representative groups of citizens across Canada have formed discussion clubs to give broadcasts on current Canadian questions. The forum method has also been used, as in the "Whither Democracy" series on the problems of Canadian politics and economics. Care is taken to ensure that such programs are well balanced, with all major points of view presented. On current affairs, commentaries on international events have been given on Sunday afternoons, while special talks on British and United States affairs have been brought directly to Canadian listeners from London and New York.

In British Columbia, in co-operation with the provincial Department of Education, an interesting experiment was begun with a series of broadcasts to schools.

In June a special mobile unit was added to the CBC's broadcasting equipment. This unit, which consists of a motor van in which is installed the most modern and scientifically correct broadcasting apparatus, enables the CBC to cover important special events of national interest which it hitherto has not been able to present to Canadian listeners. The unit, which is capable of transmitting programs by short-wave to a CBC station for release over the national network, also contains recording machines. These recording machines are being used for the presentation of programs from remote parts, reflecting the varied and distinctive character of Canadian life. Broadcasts of this nature include a series entitled "Summer Over Prince Edward Island", "Summer over Nova Scotia", and "Summer Over New Brunswick". A series of descriptive broadcasts of the National Parks also is planned.

An outstanding feature of the CBC's program policy was the inauguration of a series of broadcasts by leading Canadian symphony orchestras. This series was inaugurated in May when the Toronto Promenade Symphony Orchestra concerts were broadcast over the CBC national network and over the vast blue and red networks of the NBC in the United States. This series proved very successful and the broadcasting of symphony music of Canadian orchestras over such networks is

to be encouraged. All the more important music organizations in Canada eventually are to be included in this plan.

Select Standing Committee on National Broadcasting.—On Feb. 24, 1938, the Government appointed a Select Standing Committee to review the policies of the CBC, with special reference to revenues, expenditure, and development. The Committee held seven meetings and, following deliberations of its findings, the Committee reported to the Government that it approved the policies followed by the CBC, its business administration and set-up and that it was in accord with the CBC's plan for national coverage, involving ownership of high-power stations and the extension of Corporation coverage through its own comprehensive facilities—facilities which, it was pointed out, are urgently required. A feature of the Committee's report was the recommendation that a high-power short-wave transmitting station should be established at an early date for the purpose of interpreting and advertising Canada abroad and to facilitate the exchange of programs between Canada and other countries. It should be financed, the Committee recommended, as a national project, operated and controlled by the CBC. Canada, at the present time, is the only major trading nation without such facilities.

Early in the year, the CBC entered into an arrangement with the BBC which made possible exchange of producers between the two systems. A CBC representative spent six months with the BBC, during which time he made a study of broadcasting in England; at the same time a BBC representative was the guest of the CBC. It is the intention of the CBC to effect other exchanges with various countries from time to time.

During the year the CBC continued with even greater success than in previous years the exchange of programs with Great Britain, the United States, and a number of European and South American countries.

PART VIII.—THE POST OFFICE.*

Historical.—A brief account of the pre-Confederation development of postal services in Canada was given on pp. 789-790 of the 1934-35 Year Book.

At Confederation the provincial systems were transferred to the Dominion. The Post Office Act of 1867 established a service throughout Canada. The domestic rate on letters was reduced from 5 to 3 cents per half-ounce, and in 1870 the rates to the United States and the United Kingdom were reduced from 10 to 6 cents and from 12½ to 6 cents, respectively, per half-ounce. In 1875 a convention between Canada and the United States reduced postal rates between the countries to the domestic level. In 1878, on the admission of Canada to the Postal Union, letter postage to the countries of the Postal Union was reduced to 5 cents per half-ounce. After a conference in 1897 Imperial penny postage (2 cents per half-ounce) was established on Dec. 25, 1898, while the domestic rate was reduced from 3 to 2 cents per ounce. These rates were maintained until 1915, when, with the rising costs of the war period, rates were increased. Penny postage again became effective for Canada, to the United States, Newfoundland and other countries of North America on July 1, 1926, and to the United Kingdom and all other places within the British Empire on Dec. 25, 1928, with later extensions to France and South America. On July 1, 1931, a special revenue tax, imposed by the Government for the purpose of obtaining additional revenue, came into effect on letters addressed to places in Canada, throughout the Empire, to France, to Spain and to North and South America generally, making the rate in these cases 3 cents for the first ounce and 2 cents for each additional ounce.

*Revised by H. Beaulieu, Director, Administrative Services, Post Office Department.

The Post Office Department is administered by the Postmaster General. Besides the several administrative branches at Ottawa, the Dominion is divided into 15 districts, each in charge of a District Director or Superintendent of Postal Service. The Canadian system embraces a territory more extensive than that served by any other system, excepting those of United States and Russia, and the relatively small population compared with the great distance to be covered makes inevitable a peculiarly difficult and relatively expensive service.

Rural Mail Delivery.—A system of rural mail delivery was inaugurated in Canada on Oct. 10, 1908, limited at that time to existing stage routes. The service was greatly extended by new regulations taking effect on Apr. 1, 1912. The result has been an increase in the number of rural routes from approximately 900 in 1912 to 4,436 in 1936, having 246,462 mail boxes as against approximately 25,000 in 1912.

Mail Transportation.—The conveyance of mail by land, water, and air entailed a total expenditure of \$13,358,239 during the fiscal year ended 1937. Railway carriage cost \$6,808,896, land transportation (largely that by rural delivery) cost \$5,988,040, conveyance by steamship cost \$272,721, while that by air cost \$288,582. These amounts were paid solely for services rendered as carriers. For details regarding air-mail services, see p. 737. Special subsidies are granted to assure the maintenance of certain steamship services. Since these subsidized services provide transportation for passengers and freight as well as mail, the subsidies are included with other expenditures on water transportation on pp. 694-696.

Statistics.—Tables 1 to 3 show, respectively, the numbers of post offices in operation in Canada in the latest six years, the gross revenue in each office collecting \$10,000 and upwards in 1936 and 1937, and the net revenues and expenditures the Department in various years since 1890.

1.—Numbers of Post Offices in Operation, by Provinces, Mar. 31, 1932-37.

Province.	1932.	1933.	1934.	1935.	1936.	1937.
Prince Edward Island.....	116	114	115	114	114	114
Nova Scotia.....	1,673	1,629	1,600	1,571	1,565	1,551
New Brunswick.....	1,025	1,016	1,004	1,000	1,002	1,009
Quebec.....	2,451	2,446	2,450	2,466	2,494	2,542
Ontario.....	2,522	2,524	2,523	2,540	2,559	2,589
Manitoba.....	781	778	778	788	788	794
Saskatchewan.....	1,424	1,423	1,426	1,433	1,460	1,482
Alberta.....	1,200	1,215	1,213	1,228	1,243	1,246
British Columbia.....	905	892	889	892	895	908
Yukon.....	19	19	18	18	18	18
Northwest Territories.....	17	18	19	19	18	19
Totals.....	12,133	12,074	12,035	12,069	12,156	12,272

2.—Statistics of Gross Postal Revenues of Offices Collecting \$10,000 and upwards, fiscal years ended Mar. 31, 1936 and 1937.

Name of Post Office.	1936.	1937.	Name of Post Office.	1936.	1937.
P.E. Island.	\$	\$	Nova Scotia—concluded.	\$	\$
Charlottetown.....	79,155	80,282	North Sydney.....	16,426	16,345
Summerside.....	24,664	25,053	Pictou.....	14,248	13,912
Totals for Province.....	177,984	173,542	Springhill.....	12,542	11,995
Nova Scotia.			Stellarton.....	10,434	10,283
Amherst.....	35,700	35,607	Sydney.....	75,126	76,004
Antigonish.....	16,185	17,252	Truro.....	57,072	57,313
Bridgetown.....	10,086	10,021	Windsor.....	19,483	81,833
Bridgewater.....	19,727	19,585	Wolfville.....	15,840	14,973
Digby.....	11,691	11,666	Yarmouth.....	31,494	30,773
Glace Bay.....	19,294	18,643	Totals for Province.....	1,486,944	1,468,049
Halifax.....	534,701	553,272	New Brunswick.		
Kentville.....	23,603	22,974	Bathurst.....	13,811	14,429
Liverpool.....	15,781	15,611	Campbellton.....	23,973	24,314
Lunenburg.....	15,364	14,090	Chatham.....	11,623	10,961
New Glasgow.....	39,469	39,306	Dalhousie.....	10,142	10,089

2.—Statistics of Gross Postal Revenues of Offices Collecting \$10,000 and upwards, fiscal years ended Mar. 31, 1936 and 1937—continued.

Name of Post Office.	1936.	1937.	Name of Post Office.	1936.	1937.
New Brunswick—conc.	\$	\$	Ontario—concluded.	\$	\$
Edmundston.....	17,209	17,400	Gravenhurst.....	12,203	11,838
Fredericton.....	78,203	82,550	Grimsby.....	12,495	11,791
Moncton.....	432,243	462,878	Guelph.....	106,449	107,991
Newcastle.....	13,821	13,526	Haileybury.....	13,780	13,622
Saint John.....	277,391	278,722	Hamilton.....	660,554	658,862
St. Stephen.....	19,608	18,836	Hanover.....	15,297	15,889
Sackville.....	20,127	20,257	Hawkesbury.....	11,554	11,226
Sussex.....	16,398	16,255	Hespeler.....	11,420	11,724
Woodstock.....	19,329	19,671	Huntsville.....	17,893	17,239
Totals for Province.....	1,272,555	1,296,074	Ingersoll.....	33,864	24,877
Quebec.			Kapuskasing.....	11,915	12,095
Amos.....	18,110	21,155	Kenora.....	31,374	31,780
Chicoutimi.....	29,162	32,088	Kincardine.....	16,271	19,581
Coaticook.....	12,748	12,504	Kingston.....	125,630	127,563
Drummondville East.....	34,470	34,629	Kingsville.....	10,185	10,831
Farnham.....	16,050	16,179	Kirkland Lake.....	52,977	59,870
Gardenvale.....	45,141	29,153	Kitchener.....	141,407	148,821
Granby.....	29,996	31,090	Leamington.....	23,112	23,557
Grand Mère.....	13,532	13,854	Lindsay.....	39,211	36,305
Hull.....	40,645	39,752	Listowel.....	13,184	12,773
Joliette.....	24,532	24,523	London.....	518,446	534,018
Lachute.....	10,924	10,820	Meaford.....	10,626	11,574
La Tuque.....	13,823	13,702	Midland.....	21,970	21,848
Lennoxville.....	10,652	10,989	Napanee.....	21,629	21,385
Lévis.....	24,574	24,980	New Liskeard.....	24,775	24,810
Magog.....	13,827	13,169	Newmarket.....	19,951	19,240
Montmagny.....	12,213	12,591	Niagara Falls.....	112,452	124,587
Montreal.....	4,682,060	4,918,172	North Bay.....	70,414	72,937
Noranda.....	19,109	21,114	Oakville.....	20,518	21,817
Quebec.....	630,332	683,480	Orangeville.....	13,454	13,011
Rimouski.....	20,124	20,515	Orillia.....	43,219	43,506
Rock Island.....	13,490	12,918	Oshawa.....	103,116	119,951
Rouyn.....	21,558	23,559	Ottawa.....	926,439	731,202
Ste. Agathe des Monts.....	12,346	11,881	Owen Sound.....	52,015	50,878
St. Anne de Beaupré.....	13,285	13,364	Paris.....	22,753	22,528
St. Hyacinthe.....	45,630	47,418	Parry Sound.....	18,472	17,155
St. Jean.....	32,852	33,187	Pembroke.....	31,352	30,268
St. Jérôme.....	19,187	18,773	Perth.....	30,734	29,182
Shawinigan Falls.....	26,394	27,317	Peterborough.....	128,750	131,954
Sherbrooke.....	125,482	128,895	Petrolia.....	11,668	10,848
Sorel.....	20,103	20,508	Pictou.....	20,386	19,569
Thetford Mines.....	19,397	20,258	Port Arthur.....	66,675	69,419
Three Rivers.....	78,946	82,960	Port Colborne.....	19,809	21,238
Valleyfield.....	15,705	19,133	Port Credit.....	11,251	11,186
Victoriaville.....	21,533	22,538	Port Hope.....	23,370	22,817
Totals for Province.....	7,736,905	8,020,065	Prescott.....	13,760	13,348
Ontario.			Preston.....	25,603	26,783
Amherstburg.....	11,162	10,056	Red Lake.....	8,832	10,962
Arnprior.....	14,649	14,638	Renfrew.....	26,282	26,153
Aurora.....	13,065	13,108	St. Catharines.....	120,376	121,736
Aylmer West.....	12,136	11,960	St. Marys.....	16,993	16,454
Barrie.....	32,313	32,817	St. Thomas.....	59,757	60,020
Belleville.....	71,514	73,571	Sarnia.....	67,165	67,266
Bowmanville.....	14,817	15,164	Sault Ste. Marie.....	68,302	71,842
Bracebridge.....	16,063	15,677	Schumacher.....	10,307	10,208
Brampton.....	28,054	31,162	Seaforth.....	10,442	10,618
Brantford.....	142,423	142,514	Simcoe.....	43,917	46,222
Brockville.....	52,608	55,280	Sioux Lookout.....	11,730	12,861
Burlington.....	11,038	11,040	Smiths Falls.....	25,066	25,249
Campbellford.....	12,599	10,689	South Porcupine.....	12,480	14,454
Carleton Place.....	18,314	16,910	Stratford.....	66,666	65,620
Chatham.....	79,008	81,544	Strathroy.....	14,162	13,663
Cobalt.....	14,552	14,291	Sudbury.....	85,724	95,034
Cobourg.....	30,241	29,601	Thorold.....	11,081	13,302
Cochrane.....	18,361	18,319	Tilsonburg.....	17,524	18,460
Collingwood.....	17,217	16,637	Timmins.....	63,688	68,300
Copper Cliff.....	11,258	12,095	Toronto.....	7,085,300	7,626,323
Cornwall.....	53,900	52,594	Trenton.....	25,732	26,256
Dundas.....	16,478	16,721	Walkerton.....	12,125	11,659
Dunnville.....	24,620	24,091	Wallaceburg.....	14,762	14,915
Fergus.....	20,804	21,694	Waterloo.....	56,389	53,890
Fort Erie North.....	19,955	22,344	Welland.....	44,258	44,259
Fort Frances.....	20,554	21,574	Weston.....	24,514	23,082
Fort William.....	83,758	86,863	Whitby.....	13,939	14,128
Galt.....	64,129	67,797	Wiarton.....	8,987	10,471
Gananoque.....	17,831	18,048	Windsor.....	400,098	417,201
Georgetown.....	21,650	22,607	Wingham.....	11,587	11,483
Goderich.....	18,555	18,097	Woodstock.....	58,064	60,520
Totals for Province.....	15,212,885	15,735,895			

2.—Statistics of Gross Postal Revenues of Offices Collecting \$10,000 and upwards, fiscal years ended Mar. 31, 1936 and 1937—concluded.

Name of Post Office.	1936.	1937.	Name of Post Office.	1936.	1937.
Manitoba.	\$	\$	Alberta—concluded.	\$	\$
Brandon.....	83,201	81,012	Wetaskiwin.....	17,280	15,916
Dauphin.....	22,813	23,627	Totals for Province....	2,379,888	2,296,780
Flintholm.....	17,217	17,713	British Columbia.		
Neepawa.....	11,659	11,739	Chilliwack.....	22,962	22,874
Norwood Grove.....	8,659	10,026	Courtenay.....	11,531	11,717
Portage la Prairie.....	29,089	29,626	Cranbrook.....	21,242	20,424
St. Boniface.....	25,993	26,682	Duncan.....	23,797	24,008
The Pas.....	17,366	17,491	Ferne.....	12,436	11,082
Wawanesa.....	10,819	11,928	Kamloops.....	39,298	39,463
Winnipeg.....	2,957,539	3,049,995	Kelowna.....	33,695	32,576
Totals for Province....	3,744,076	3,802,996	Kimberley.....	11,290	10,328
Saskatchewan.			Mission City.....	10,557	10,177
Assiniboia.....	11,210	10,979	Nanaimo.....	31,336	32,350
Estevan.....	16,115	15,719	Nelson.....	50,187	50,237
Humboldt.....	14,286	14,220	New Westminster.....	99,491	100,313
Lloydminster.....	14,846	13,437	Penticton.....	28,310	29,610
Melfort.....	16,937	15,928	Port Alberni.....	16,402	18,400
Melville.....	15,250	14,838	Powell River.....	14,841	13,321
Moose Jaw.....	100,592	104,168	Prince George.....	12,084	11,581
North Battleford.....	37,226	35,895	Prince Rupert.....	31,122	29,988
Prince Albert.....	54,341	55,051	Revelstoke.....	15,441	14,953
Regina.....	816,156	863,020	Roseland.....	10,907	10,223
Rosetown.....	11,849	11,941	Salmon Arm.....	11,887	11,182
Saskatoon.....	326,789	334,454	Trail.....	42,988	43,275
Shaunavon.....	12,184	11,299	Vancouver.....	1,518,919	1,617,289
Swift Current.....	35,550	33,807	Vernon.....	35,734	34,618
Tisdale.....	11,856	11,044	Victoria.....	324,306	342,264
Weyburn.....	25,165	24,090	Totals for Province....	3,071,394	3,156,310
Yorkton.....	37,393	38,468	Yukon.		
Totals for Province....	2,833,336	2,750,110	Totals for Yukon....	16,704	17,129
Alberta.			Summary.		
Banff.....	17,379	19,547	Prince Edward Island....	177,985	173,542
Calgary.....	588,109	598,258	Nova Scotia.....	1,486,945	1,468,049
Camrose.....	17,965	16,791	New Brunswick.....	1,272,555	1,296,074
Drumheller.....	23,165	22,430	Quebec.....	7,736,908	8,020,065
Edmonton.....	577,549	592,073	Ontario.....	15,212,886	15,735,895
Grande Prairie.....	11,794	12,035	Manitoba.....	3,744,077	3,802,996
Lacombe.....	12,129	11,564	Saskatchewan.....	2,833,336	2,750,110
Lethbridge.....	81,286	77,855	Alberta.....	2,379,888	2,296,780
Medicine Hat.....	43,464	42,981	British Columbia.....	3,071,394	3,156,310
Ponoka.....	10,724	10,338	Yukon.....	16,704	17,129
Red Deer.....	21,646	21,591	Totals for Canada....	37,932,678	38,716,550
Vegreville.....	11,961	10,798			
Vermilion.....	10,389	10,076			

3.—Revenues and Expenditures of the Post Office Department for the quinquennial fiscal years ended 1890-1910, and fiscal years ended Mar. 31, 1911-37.

NOTE.—For all other years since Confederation, see 1911 Year Book, p. 288.

Fiscal Year.	Net Revenue. ¹	Expendi- ture.	Deficit.	Surplus.	Fiscal Year.	Net Revenue. ¹	Expendi- ture.	Deficit.	Surplus.
	\$	\$	\$	\$		\$	\$	\$	\$
1890...	2,357,389	3,074,470	717,081	—	1922...	26,554,538	28,121,425	1,566,887	—
1895...	2,792,790	3,593,647	800,857	—	1923...	29,262,233	27,794,502	—	1,467,731
1900...	3,183,984	3,645,646	461,662	—	1924...	29,100,492	28,305,937	—	794,555
1905...	5,125,373	4,634,528	—	490,845	1925...	28,551,993	29,873,802	1,291,809	—
1910...	7,958,547	7,215,337	—	743,210	1926...	31,024,464	30,499,686	—	524,778
1911...	9,146,952	7,954,223	—	1,192,729	1927...	29,378,697	31,007,698	1,629,001	—
1912...	10,482,255	9,172,035	—	1,310,220	1928...	30,529,155	32,379,196	1,850,041	—
1913...	12,060,476	10,882,805	—	1,177,671	1929...	31,170,904	33,483,058	2,312,154	—
1914...	12,956,216	12,822,058	—	134,158	1930...	32,969,293	35,036,629	2,067,336	—
1915...	13,046,650	15,961,191	2,914,541	—	1931...	30,416,107	36,292,604	5,876,497	—
1916...	18,858,410	16,009,139	—	2,849,271	1932...	32,476,604	34,448,986	1,972,382	—
1917...	20,902,384	16,300,579	—	4,601,805	1933...	30,825,155	30,167,827	—	657,328
1918...	21,345,394	18,046,558	—	3,298,836	1934...	30,367,465	29,202,730	—	1,164,735
1919...	21,602,713	19,273,584	—	2,329,129	1935...	31,248,324	28,974,316	—	2,274,007
1920...	24,449,917	20,774,385	—	3,675,532	1936...	32,507,888	30,100,102	—	2,407,787
1921...	26,331,119	24,661,262	—	1,669,857	1937...	34,274,552	30,538,575	—	3,735,977

¹ "Net Revenue" is exclusive of commissions and allowances to postmasters and some other smaller items. The gross revenue in the fiscal year 1936 was \$39,203,500 and in 1937, \$41,181,566.

Postage.—The net revenue receipts shown in Table 3 are mainly received in the form of postage as is indicated by the following gross figures.

The gross value of the postage stamps, post cards, etc., sold during each of the latest eight fiscal years, was: \$27,101,353 in 1930, \$25,769,781 in 1931, \$27,242,715 in 1932, \$25,999,159 in 1933, \$25,541,129 in 1934, \$26,303,451 in 1935, \$27,341,608 in 1936, and \$28,179,323 in 1937. Receipts from postage paid in cash were as follows: \$9,045,805 in 1930, \$8,887,322 in 1931, \$9,078,136 in 1932, \$8,173,950 in 1933, \$8,129,387 in 1934, \$8,619,712 in 1935, \$9,277,072 in 1936, and \$10,203,389 in 1937.

Auxiliary Services.—The auxiliary postal services—the issuing of money orders (including postal notes) and the facilities offered by the Post Office savings banks—have expanded enormously since Confederation. In 1868, there were 515 money order offices in operation, issuing orders to an amount of \$3,342,574, while the following tables show the magnitude of operations now. Statistical tables showing deposits with the Government savings banks since Confederation and the business of the Post Office savings banks, 1932-37 are included in the chapter on Currency and Banking (Chapter XXII).

4.—Operations of the Money Order System in Canada, fiscal years ended Mar. 31, 1911-37.

NOTE.—For 1868 to 1910, see Canada Year Book, 1911, p. 289; for 1901-10, see 1932 Year Book, p. 622.

Fiscal Year.	Money Order Offices in Canada.	Orders Issued in Canada.	Value of Orders Issued in Canada.	Payable in—		Value of Orders Issued in other Countries, Payable in Canada.
				Canada.	Other Countries.	
	No.	No.	\$	\$	\$	\$
1911.....	3,501	4,840,896	70,614,862	45,451,425	25,163,437	8,664,557
1912.....	3,673	5,777,757	84,065,891	52,568,433	31,497,458	8,712,667
1913.....	3,923	8,688,563	101,153,272	61,324,030	39,829,242	9,081,627
1914.....	4,274	7,227,964	109,500,670	66,113,221	43,387,449	9,807,313
1915.....	4,499	6,990,813	89,957,906	64,723,941	25,233,965	9,707,383
1916.....	4,690	7,171,375	94,469,871	75,781,582	18,688,289	9,868,137
1917.....	4,810	8,698,502	119,695,535	97,263,961	22,431,574	9,704,610
1918.....	4,930	9,919,665	142,959,167	116,764,491	26,194,676	9,385,627
1919.....	4,953	9,100,707	142,375,809	116,646,096	25,729,713	10,351,021
1920.....	5,106	9,947,018	159,224,937	135,201,816	24,023,121	10,050,361
1921.....	5,197	11,013,167	173,523,322	155,916,232	17,607,090	6,680,971
1922.....	5,266	10,031,198	139,914,186	124,316,726	15,597,460	5,515,069
1923.....	5,337	11,098,222	143,055,120	126,617,350	16,437,770	8,986,041
1924.....	5,472	12,561,490	159,855,115	141,620,372	18,234,743	13,508,396
1925.....	5,578	13,435,448	163,519,320	145,769,761	17,749,559	13,957,613
1926.....	5,706	14,784,230	177,840,231	158,844,831	18,995,400	15,600,917
1927.....	5,797	15,760,994	188,219,777	167,206,859	21,012,918	15,532,673
1928.....	5,923	17,505,563	200,773,403	177,880,036	22,893,367	15,398,181
1929.....	6,066	17,210,316	203,129,237	179,833,100	23,296,138	14,096,027
1930.....	6,209	17,525,979	197,699,353	174,285,024	23,414,329	14,016,240
1931.....	6,401	16,313,134	167,749,651	149,012,359	18,737,292	12,906,487
1932.....	6,414	14,324,715	132,625,260	121,391,212	11,234,048	9,097,086
1933.....	6,467	12,659,379	107,767,394	102,009,862	5,757,532	5,079,234
1934.....	6,464	12,633,710	107,471,321	101,926,369	5,544,952	5,401,118
1935.....	6,531	12,673,794	114,832,665	107,981,978	6,850,687	5,932,762
1936.....	6,627	13,133,354	121,810,839	114,761,204	7,049,635	6,559,564
1937.....	6,737	13,746,743	133,155,222	124,479,322	8,675,900	7,280,169

5.—Money Order Statistics, by Provinces, and Total Postal Notes, fiscal years ended Mar. 31, 1933-37.

Province.	1933.	1934.	1935.	1936.	1937.
	No.	No.	No.	No.	No.
Money Order Offices in—					
Canada	6,467	6,464	6,531	6,627	6,737
Prince Edward Island.....	73	73	73	73	72
Nova Scotia.....	427	425	428	429	441
New Brunswick.....	309	305	310	315	317
Quebec.....	1,371	1,373	1,380	1,400	1,427
Ontario.....	1,700	1,678	1,690	1,725	1,736
Manitoba.....	458	460	471	476	481
Saskatchewan.....	919	935	948	960	993
Alberta.....	680	684	691	708	723
British Columbia.....	524	525	534	535	541
Yukon.....	6	6	6	6	6
Money Orders Issued in—					
Canada	12,659,379	12,633,710	12,673,794	13,133,354	13,746,743
Prince Edward Island.....	108,485	117,322	109,122	114,868	118,827
Nova Scotia.....	832,395	880,606	891,104	911,153	927,924
New Brunswick.....	459,879	483,746	488,075	496,936	523,288
Quebec.....	1,877,359	1,864,996	1,874,251	1,979,591	2,127,105
Ontario.....	3,372,544	3,320,911	3,426,862	3,465,843	3,648,744
Manitoba.....	925,918	932,236	909,860	925,054	990,123
Saskatchewan.....	2,219,345	2,228,527	2,146,163	2,318,370	2,348,036
Alberta.....	1,634,159	1,654,541	1,643,725	1,673,634	1,725,801
British Columbia.....	1,218,591	1,140,596	1,174,553	1,236,914	1,324,818
Yukon.....	10,704	10,229	10,079	10,991	12,077
	\$	\$	\$	\$	\$
Value of Money Orders in—					
Canada	107,767,394	107,471,321	114,832,665	121,810,839	133,155,222
Prince Edward Island.....	985,242	1,016,634	969,870	1,014,092	1,099,648
Nova Scotia.....	7,247,988	7,268,581	7,805,723	8,130,794	8,512,734
New Brunswick.....	4,085,415	4,181,138	4,341,140	4,509,609	4,837,795
Quebec.....	15,729,506	15,213,011	16,308,934	17,554,015	19,738,187
Ontario.....	28,998,040	28,211,079	30,868,605	32,039,755	35,379,028
Manitoba.....	7,642,324	7,843,981	8,238,040	8,211,359	9,441,609
Saskatchewan.....	18,556,560	18,944,362	19,654,449	22,384,564	23,851,266
Alberta.....	14,903,895	14,840,731	15,876,608	16,392,097	17,424,010
British Columbia.....	9,453,581	9,807,995	10,626,810	11,415,066	12,695,912
Yukon.....	164,843	143,809	142,486	159,488	175,033
	No.	No.	No.	No.	No.
Money Orders Paid in—					
Canada	12,239,065	12,215,611	12,228,783	12,549,695	13,080,556
Prince Edward Island.....	44,654	43,041	41,686	42,386	44,378
Nova Scotia.....	528,288	538,841	562,941	557,860	563,167
New Brunswick.....	744,867	774,924	777,627	792,991	817,643
Quebec.....	1,572,443	1,541,862	1,563,062	1,657,924	1,784,960
Ontario.....	3,972,323	3,906,095	3,922,944	3,957,563	4,152,562
Manitoba.....	2,588,330	2,688,168	2,604,349	2,706,591	2,732,859
Saskatchewan.....	1,527,786	1,473,521	1,459,678	1,477,281	1,511,159
Alberta.....	648,958	640,394	656,848	679,123	740,803
British Columbia.....	610,333	607,896	638,887	677,186	732,245
Yukon.....	1,083	869	761	790	780
	\$	\$	\$	\$	\$
Value of Money Orders Paid in—					
Canada	107,908,214	106,908,174	114,054,602	120,725,752	131,257,438
Prince Edward Island.....	573,511	557,281	538,204	545,660	588,953
Nova Scotia.....	5,272,743	5,131,281	5,530,006	5,741,560	6,096,036
New Brunswick.....	6,157,997	6,186,968	6,553,543	6,755,746	7,104,652
Quebec.....	14,545,094	13,966,669	15,152,171	16,185,467	18,180,150
Ontario.....	33,407,667	32,529,477	34,734,816	36,288,177	39,787,824
Manitoba.....	20,161,603	21,378,560	22,091,686	23,313,484	24,396,689
Saskatchewan.....	12,590,724	12,194,519	12,860,754	14,298,781	15,553,218
Alberta.....	8,384,182	8,061,119	8,984,483	9,428,761	10,391,550
British Columbia.....	6,798,175	6,887,535	7,594,163	8,151,767	9,144,277
Yukon.....	16,318	14,765	14,776	16,349	14,289
Postal Notes—					
Total notes paid..... No.	5,963,810	5,115,761	5,772,119	6,730,361	7,077,540
Total value, including postal note stamps affixed..... \$	10,530,490	9,247,459	10,246,800	11,374,903	12,020,467

Air-Mail Services.—The total weight of mail carried by air throughout Canada during the year ended Mar. 31, 1937, was 1,200,831 lb., while the mileage flown was 977,864.

An interesting feature of the returns is the continued volume of mail carried by air into the several mining districts, and there would seem to be little doubt that arial postal communication contributes materially to the development of Canada's natural resources.

6.—Mileage Flown and Weight of Mail Carried by Air, fiscal year ended Mar. 31, 1937.

Service.	Distance.	Single Trips.		Mileage Travelled.	Weight of Mail Carried.
		Scheduled.	Performed. ¹		
	miles.	No.	No.	miles.	lb.
Amos-Siscoe-Val d'Or—Bourlamaque ² ...	52	28	33	1,716	14,650
Atlin-Telegraph.....	146	20	20	2,920	3,510
Cameron Bay-Coppermine.....	165	4	24	3,960	2,885
Central Manitoba and Northern Ontario Mining Areas—					
Kenora-Red Lake.....	105	360	439	45,995	106,252
Sioux Lookout-Casummit Lake.....	212 ³	280	272	29,122	35,721
Sioux Lookout-Red Lake.....	115	245	283	32,535	49,106
Winnipeg-Lac du Bonnet.....	198	291	500	97,700	113,406
Charlottetown-Magdalen Islands.....	106	44	60	6,360	20,170
Edmonton-Fort St. John ⁴	443	6	6	2,658	445
Fort Chipewyan-Goldfields.....	108	24	108	11,664	11,080
Mackenzie River Service—					
Fort McMurray-Fort Smith.....	1,459	160	255	118,917	74,235
Fort Smith-Fort Resolution.....		80	153		
Fort Resolution-Fort Norman.....		24	49		
Fort Norman-Aklavik.....		12	19		
Fort Resolution-Cameron Bay.....	428	24	89	31,709	17,778
Fort St. John-Fort Graham ⁵	170	4	4	716	1,477
Fort St. John-Fort Nelson ⁶	220	2	2	440	650
Gods Lake-Cross Lake-Norway House...	177	22	25	4,337	4,661
Goldfields-Fond du Lac.....	42	8	10	420	678
Haileybury-Mud Lake ⁷	50	132	129	6,450	7,784
Ile à la Crosse-La Loche ⁸	96	10	24	1,794	3,931
Kenora-Cole.....	115	183	189	2,310	15,233
Kenora-Machin ⁹	25	97	98	2,450	3,597
Kenora-Whitefish Bay.....	40	94	94	3,760	5,881
Leamington-Pelee Island.....	22	188	180	3,960	19,349
Moncton-Charlottetown.....	100	626	621	62,100	250,303
Montreal-Albany.....	200	313	257	52,204	47,114
Montreal-Rimouski.....	309.5	63	54	16,014	42,676
North Shore—					
Quebec-Rimouski-Sept Iles.....	358	111	107	20,670	46,133
Sept Iles-Natashquan.....	205	60	60	12,300	18,547
Havre St. Pierre-Port Menier.....	45.5	14	14	637	3,892
Natashquan-Harrington Harbour.....	112	16	16	1,792	2,441
Special flights.....	Varied.	56	56	6,606	18,090
Oskelaneo-Chibougamau ¹⁰	130	36	43	5,380	3,552
Ottawa-Montreal ¹¹	108	426	301	32,508	1,691
Prince Albert-Goldfields ¹²	465	66	109	50,685	14,081
Prince Albert-Ile à la Crosse-Lac la Ronge.....	177	171	172	28,703	27,158
Rouyn-Kewagamau ¹³	25	10	10	250	902
Sioux Lookout-Pickle Crow.....	125	326	338	41,620	53,517
Vancouver-Seattle.....	122	626	592	72,132	35,238
Vancouver-Victoria.....	61	362	342	20,862	1,754
Winnipeg-Gods Lake.....	791 ¹	94	139	49,674	76,546
Winnipeg-Pembina.....	66.4	730	691	45,884	31,153
Winnipeg-Red Lake ¹⁴	170	76	114	19,380	6,336
Special flights.....	Varied.	113	113	26,570	7,278
Totals.....	-	6,637	7,214	977,864	1,200,831

¹Extra trips performed at contractors' convenience. ²Discontinued Apr. 23, 1936.
³Round trip. ⁴Inaugurated Mar. 17, 1937. ⁵Inaugurated Jan. 13, 1937. ⁶Inaugurated
Jan. 11, 1937. ⁷Inaugurated July 21, 1936. ⁸Inaugurated Nov. 18, 1936. ⁹Discontinued
Dec. 11, 1936. ¹⁰Inaugurated Oct. 1, 1936. ¹¹Inaugurated July 27, 1936. ¹²Inaugurated
July 13, 1936. ¹³Discontinued Apr. 17, 1936. ¹⁴Inaugurated Feb. 13, 1937.

PART IX.—THE PRESS.

The Dominion Bureau of Statistics does not collect statistics regarding the circulation of newspapers and periodicals in Canada but a short treatment compiled from data published in *McKim's Directory of Canadian Publications* is introduced here. Industrial statistics of the printing and publishing, and of the printing and bookbinding industries will be found on p. 426, in Chapter XIV, dealing with manufactures. The press is a very important factor in carrying information to the people and in crystallizing and expressing public opinion on current questions. In any survey of methods of communication it occupies a noteworthy place.

The publications enumerated in Table 1 include a number for which no estimate of circulation is given. Such publications are therefore omitted from the compilation of circulations in Tables 2 and 3. This accounts for the difference in the number of daily, semi-weekly, and weekly publications shown in Tables 1 and 2. Comparison of the figures of Table 3 showing publications in cities of 20,000 population or over, with those for the same year of Table 2, showing publications for the whole of Canada, indicates that the daily newspapers are confined almost entirely to these larger urban communities, but that, in the field of weekly publications, while the greater part of the circulation is accounted for by the publications of these cities, by far the greatest number of weeklies are issued in smaller communities. The weekly seems to be the standard medium for local news in small towns and villages.

Since circulations in many cases are only roughly estimated, totals in the tables are given in round numbers.

1.—Number of Publications in Canada, by Frequency of Issue, 1926-36.

NOTE.—Compiled from *McKim's Directory of Canadian Publications*. Figures do not include Newfoundland.

Year.	Daily.	Tri-Weekly.	Semi-Weekly.	Weekly.	Bi-Weekly and Semi-Monthly.	Monthly.	Bi-Monthly and Quarterly.	Miscellaneous.	Total.
1926....	113	7	28	929	46	365	38	10	1,536
1927....	113	6	23	935	48	385	37	9	1,556
1928....	113	7	21	950	56	390	38	15	1,590
1929....	114	5	21	958	56	384	37	19	1,594
1930....	113	4	20	994	47	402	35	18	1,633
1931....	112	8	18	965	53	425	36	24	1,641
1932....	110	7	20	975	50	415	47	27	1,651
1933....	110	6	19	960	51	426	60	38	1,670
1934....	113	6	25	986	55	454	56	38	1,733
1935....	115	8	22	1,000	58	449	66	50	1,768
1936....	115	9	24	996	56	450	77	52	1,779

2.—Circulation¹ of Daily, Semi-Weekly, and Weekly Publications in Canada, 1926-36, with Details by Provinces, 1936.

NOTE.—Figures for circulation given to the nearest thousand as some publications are not exactly reported. Compiled from *McKim's Directory of Canadian Publications*.

Year.	Daily. ²		Semi-Weekly. ³		Weekly. ⁴	
	No.	Circulation.	No.	Circulation.	No.	Circulation.
1926.....	112	1,943,000	26	93,000	822	2,729,000
1927.....	112	2,001,000	26	93,000	821	3,008,000
1928.....	112	2,087,000	25	89,000	816	3,081,000
1929.....	116	2,197,000	24	84,000	825	3,264,000
1930.....	113	2,212,000	26	106,000	858	3,318,000
1931.....	111	2,233,000	26	102,000	867	3,445,000
1932.....	103	2,115,000	25	102,000	883	3,726,000
1933.....	106	2,052,000	24	91,000	860	3,349,000
1934.....	107	2,147,000	30	127,000	867	3,663,000
1935.....	109	2,230,000	28	113,000	884	3,929,000

For footnotes, see end of table, p. 738.

2.—Circulation¹ of Daily, Semi-Weekly, and Weekly Publications in Canada, 1926-36, with Details by Provinces, 1936—concluded.

Year and Province.	Daily. ²		Semi-Weekly. ³		Weekly. ⁴	
	No.	Circulation.	No.	Circulation.	No.	Circulation.
1936.						
Prince Edward Island.....	2	11,000	Nil	—	4	15,000
Nova Scotia.....	9	115,000	2	5,000	37	74,000
New Brunswick.....	6	56,000	3	5,000	18	41,000
Quebec.....	19	588,000	Nil	—	122	1,376,000
Ontario.....	38	1,003,000	15	92,000	304	1,511,000
Manitoba.....	7	114,000	5	26,000	85	440,000
Saskatchewan.....	5	66,000	Nil	—	145	266,000
Alberta.....	6	98,000	1	2,000	86	144,000
British Columbia ⁵	17	225,000	6	9,000	74	198,000
Totals, 1936.....	109	2,276,000	32	139,000	875	4,065,000

¹ For newspapers—average for 12 months ended Sept. 30; for periodicals—average for 6 months ended Dec. 31.

² Includes the sum of morning and evening editions of the same newspaper. Also includes papers issued five times a week.

³ Includes papers published two, three, or four times a week.

⁴ Includes special Saturday and Sunday editions of daily papers.

⁵ Includes figures for Yukon.

3.—Circulation¹ of Daily, Semi-Weekly, and Weekly Publications, in Cities of 20,000 Population or Over, 1936.

NOTE.—Figures for circulation given in round numbers as some publications are not exactly reported. Compiled from *McKim's Directory of Canadian Publications*.

City.	Census of 1931.		Daily. ²		Semi-Weekly. ³		Weekly. ⁴	
	Population.	Households.	No.	Circulation.	No.	Circulation.	No.	Circulation.
Montreal.....	818,577	170,811	10	427,000	Nil	—	37	1,115,000
Toronto.....	631,207	149,538	7	617,000	3	—	42	999,000
Vancouver.....	246,593	60,530	6	181,000	3	5,000	13	89,000
Winnipeg.....	218,785	48,294	4	106,000	4	24,000	25	384,000
Hamilton.....	155,547	37,217	1	51,000	Nil	—	3	29,000
Quebec.....	130,594	23,043	6	133,000	Nil	—	8	24,000
Ottawa.....	126,872	27,658	3	83,000	1	15,000	1	17,000
Calgary.....	83,761	20,371	2	43,000	Nil	—	2	36,000
Edmonton.....	79,197	18,868	2	47,000	1	2,000	6	21,000
London.....	71,148	17,549	1	39,000	Nil	—	4	54,000
Windsor.....	63,108	14,900	1	44,000	Nil	—	Nil	—
Verdun.....	60,745	13,914	Nil	—	Nil	—	2	28,000
Halifax.....	59,275	12,147	4	91,000	Nil	—	3	4,000
Regina.....	53,209	12,017	2	39,000	Nil	—	1	7,000
Saint John.....	47,514	10,890	2	33,000	Nil	—	1	5,000
Saskatoon.....	43,291	9,698	1	19,000	Nil	—	5	145,000
Victoria.....	39,082	10,431	3	25,000	Nil	—	2	28,000
Three Rivers.....	35,450	6,191	1	11,000	Nil	—	2	10,000
Kitchener.....	30,793	7,189	1	11,000	Nil	—	Nil	—
Brantford.....	30,107	7,487	1	12,000	Nil	—	Nil	—
Hull.....	29,433	5,394	Nil	—	Nil	—	4	14,000
Sherbrooke.....	28,933	5,666	2	16,000	Nil	—	2	15,000
Outremont.....	28,641	6,086	Nil	—	Nil	—	Nil	—
Fort William.....	26,277	5,576	1	6,300	Nil	—	1	6,400
St. Catharines.....	24,753	6,115	1	10,000	1	6,000	Nil	—
Westmount.....	24,235	5,454	Nil	—	Nil	—	1	7,000
Kingston.....	23,439	5,514	1	11,000	1	2,000	1	4,000
Oshawa.....	23,439	5,605	1	3,000	Nil	—	1	5,300
Sydney.....	23,089	4,494	1	11,000	Nil	—	Nil	—
Sault Ste. Marie.....	23,082	4,989	1	6,000	Nil	—	Nil	—
Peterborough.....	22,327	5,295	1	8,900	Nil	—	Nil	—
Moose Jaw.....	21,299	5,176	1	4,500	Nil	—	3	9,000
Guelph.....	21,075	5,096	1	7,000	Nil	—	Nil	—
Glace Bay.....	20,706	3,819	1	7,400	Nil	—	Nil	—
Moncton.....	20,689	4,201	2	13,000	Nil	—	1	5,000
Totals.....	3,386,272	757,223	72	2,116,100	14	82,000	171	3,060,700

¹ For newspapers—average for 12 months ended Sept. 30; for periodicals—average for 6 months ended Dec. 31.

² Includes the sum of morning and evening editions of the same newspaper. Also includes papers issued five times a week.

³ Includes papers published two, three, or four times a week.

⁴ Includes special Saturday and Sunday editions of daily papers.

Publications in the French Language.—Such publications include a comparatively large proportion of periodicals dealing with literature, music, religion, and similar cultural subjects, and the circulations of many of these periodicals are not reported in *McKim's Directory of Canadian Publications*. Publications for which the circulations are not reported are not included in either the number or circulation figures of Table 4 below. Since the majority of such unreported publications are likely to have fairly small circulations, the figures of the table represent a larger proportion of total circulation than of the total number of publications. Among daily newspapers, there is only one small publication unreported in each year.

4.—Number and Circulation of French Language Publications in Canada, by Provinces, 1935 and 1936.

NOTE.—Figures of circulation given to nearest thousand as some publications are not exactly reported. Compiled from *McKim's Directory of Canadian Publications*.

Year and Province.	Daily.		Weekly.		Semi-Monthly and Monthly.		Other. ¹	
	No.	Circulation.	No.	Circulation.	No.	Circulation.	No.	Circulation.
1935.								
New Brunswick.....	Nil	—	2	8,000	1	3,000	Nil	—
Quebec.....	11	342,000 ³	81	724,000 ^{2,3}	55	686,000 ²	8	176,000
Ontario.....	1	15,000	4	23,000 ²	2	21,000	1	1,000
Manitoba.....	Nil	—	1	7,000	2	5,000	Nil	—
Saskatchewan.....	Nil	—	2	9,000 ²	Nil	—	Nil	—
Alberta.....	Nil	—	1	2,000	1	2,000	Nil	—
Totals, 1935.....	12	357,000	91	773,000	61	717,000	9	177,000
1936.								
New Brunswick.....	Nil	—	2	8,000	1	3,000	Nil	—
Quebec.....	11	381,000 ³	84	747,000 ^{2,3}	63	745,000 ²	10	258,000
Ontario.....	1	15,000	3	21,000 ²	3	22,000	1	2,000
Manitoba.....	Nil	—	1	7,000	2	5,000	Nil	—
Saskatchewan.....	Nil	—	2	9,000 ²	Nil	—	Nil	—
Alberta.....	Nil	—	1	3,000	Nil	—	Nil	—
Totals, 1936.....	12	396,000	93	795,000	69	775,000	11	260,000

¹ Bi-monthly, quarterly, and annual.

² Includes bilingual publications.

³ Includes special editions for United States circulation averaging: in 1935, 12,200 daily, and 12,200 weekly; and in 1936, 11,300 daily, and 11,300 weekly.

CHAPTER XIX.—LABOUR AND WAGES.*

PART I.—LABOUR.

Section 1.—Occupations of the Wage-Earning Population.

At the census, the total population in gainful occupations is recorded. In Section 15 of Chapter IV, pp. 128-146 of the 1937 Year Book, the gainfully occupied in 1931 were dealt with rather extensively under the heading "Occupations of the Canadian People". This Section is limited to the treatment of occupations of wage-earners. The gainfully occupied population is composed of four classes of persons: (1) employers, (2) own accounts, (3) wage-earners, (4) unpaid family workers. The third class, *i.e.*, the wage-earners, comprises that portion of the gainfully occupied which in the course of its employment receives either wage or salary payment. In Canada the wage-earners numbered 2,570,097 at the 1931 Census, representing 65.44 p.c. of the total population in gainful occupations. The number of male wage-earners was 2,022,260 or 78.68 p.c. of the total of both sexes combined, and the number of female wage-earners was 547,837 or 21.32 p.c. of the total.

The only complete record of the industrial distribution of the gainfully occupied population is obtained at the decennial censuses. The usefulness of such decennial compilations, however, is considerably enhanced if the trend during intercensal years can be approximately ascertained. In this respect statistics of employment regularly collected by the Bureau of Statistics covering employees in the major fields of industry, with the exception of agriculture, fishing and some of the services, are valuable. Although difficulties of classification exist, there is reason to feel that the employment data provide the basis for projecting the figures of Table 2 for intercensal comparisons. More information on this subject will be found under the heading "Employment as Reported by Employers" on p. 768.

Table 1 shows the numerical and percentage distribution of the wage-earners by provinces in 1931.

*The sections and subsections of this chapter, with the exceptions of Sections 1, 3, 7, and 9 (Subsections 3, and 5) and Section 10, all of Part I, and Section 4 of Part II, have been revised by, or under the direction of W. M. Dickson, Deputy Minister, Department of Labour, Ottawa; the summary of Labour Legislation given in Section 12 has been specially prepared by Miss M. Mackintosh, M.A., Chief, Library and Research, of the Department. The information in Section 3, Part I, has been obtained through the courtesy of the Provincial Departments of Labour or Bureaus of Labour, and that in Section 7, Part I, has been revised by the chairmen of the respective provincial Workmen's Compensation Boards. Section 10 has been revised under the direction of Dr. W. C. Clark, Deputy Minister, Department of Finance, Ottawa. The remaining sections have been prepared and revised in the Dominion Bureau of Statistics.

1.—Numerical and Percentage Distribution of Wage-Earners, by Provinces, 1931.

Province.	Numbers.			Percentages.		
	Total.	Male.	Female.	Total.	Male.	Female.
Prince Edward Island.....	12,344	9,159	3,185	0.48	0.45	0.58
Nova Scotia.....	117,781	95,244	22,537	4.58	4.71	4.11
New Brunswick.....	84,232	66,310	17,922	3.28	3.28	3.27
Quebec.....	696,339	535,203	161,136	27.09	26.47	29.41
Ontario.....	965,607	752,851	212,756	37.57	37.23	38.84
Manitoba.....	170,739	132,883	37,856	6.64	6.57	6.91
Saskatchewan.....	145,568	116,157	29,411	5.66	5.74	5.37
Alberta.....	142,421	116,005	26,416	5.54	5.74	4.82
British Columbia.....	235,066	198,448	36,618	9.15	9.81	6.68
Totals.....	2,570,097	2,022,260	547,837	100.00	100.00	100.00

It will be seen that almost two-thirds of the wage-earners were found in Ontario and Quebec at the latest decennial census, a little less than one-fifth in the Prairie Provinces, and somewhat less than one-tenth in British Columbia or in the Maritimes.

In Table 2 the numbers and percentages of the wage-earners in the main industrial groups are given for Canada, while in Table 3 the distribution is according to broad occupational groupings. It should be noted that the industrial grouping of the gainfully occupied is not concerned with the type or kind of occupation, but rather with the product made or the service rendered, grouping together all persons in a given industry such, for example, as clothing manufacturing whether directly employed in the manufacturing process, or in the warehousing or sales branch of the business, or in clerical occupations in the office, and so on. On the other hand, the occupational grouping shown in Table 3 includes all persons following the listed occupations irrespective of the industry in which they may be engaged.

2.—Numerical and Percentage Distribution of Wage-Earners, by Industrial Groups, for Canada, 1931.

Industrial Group.	Numbers.			Percentages.		
	Total.	Male.	Female.	Total.	Male.	Female.
Agriculture.....	198,592	196,675	1,917	7.73	9.73	0.35
Forestry, fishing, trapping.....	57,844	57,550	294	2.25	2.85	0.05
Mining, quarrying.....	68,962	68,610	352	2.68	3.39	0.06
Manufacturing.....	606,617	496,865	109,752	23.60	24.57	20.03
Electric light and power.....	18,938	17,471	1,467	0.74	0.86	0.27
Construction.....	217,105	215,505	1,600	8.45	10.66	0.29
Transportation and communications.	283,675	260,429	23,246	11.04	12.88	4.24
Trade.....	281,107	204,763	76,344	10.94	10.13	13.94
Finance, insurance.....	82,963	58,102	24,861	3.23	2.87	4.54
Service.....	585,413	281,118	304,295	22.78	13.90	55.54
Unspecified.....	168,881	165,172	3,709	6.57	8.17	0.68
All Industries.....	2,570,097	2,022,260	547,837	100.00	100.00	100.00

Table 2 shows that almost one-quarter of the wage-earners are employed in the manufacturing industries, over one-fifth in the services, and just over 10 p.c. both in transportation and communications, and in trade. It will be noted that 55 p.c. of the females find employment in service, chiefly in personal and professional services.

3.—Numerical and Percentage Distribution of Wage-Earners, by Occupational Groups, for Canada, 1931.

Occupational Group.	Numbers.			Percentages.		
	Total.	Male.	Female.	Total.	Male.	Female.
Agriculture.....	202,137	200,468	1,669	7.86	9.91	0.30
Fishing and logging.....	51,901	51,859	42	2.02	2.56	0.01
Mining, quarrying.....	55,326	55,323	3	2.15	2.74	1
Manufacturing ²	416,913	341,542	75,371	16.22	16.89	13.76
Construction.....	163,904	163,814	90	6.38	8.10	0.02
Transportation and communications ³	280,035	254,674	25,361	10.90	12.59	4.63
Trade.....	208,017	162,299	45,718	8.09	8.03	8.35
Finance, insurance.....	27,457	27,010	447	1.07	1.34	0.08
Service ⁴	489,024	217,947	271,077	19.03	10.78	49.48
Professional.....	166,368	85,608	80,860	6.47	4.23	14.76
Personal ⁵	285,418	95,888	189,524	11.11	4.74	34.59
Clerical.....	239,882	123,749	116,133	9.33	6.12	21.20
Labourers and unskilled workers (not agricultural, mining, or logging)...	433,916	422,284	11,632	16.88	20.88	2.12
Unspecified.....	1,585	1,291	294	0.06	0.06	0.05
All Occupations.....	2,570,097	2,022,260	547,837	100.00	100.00	100.00

¹ Less than one-hundredth of one per cent.

² Includes "Electric Light and Power".

³ Includes

"Warehousing and Storage".

⁴ Includes Public Administration and Recreational Services in addition

to Professional and Personal.

⁵ Includes "Laundering, Cleaning, Dyeing and Pressing".

In Table 3, where the wage-earners are classified into broad occupational groups, separate groups have been shown for clerical workers and labourers in other than primary pursuits—two groups with wide industrial range. Over one-fifth of all female wage-earners reported clerical occupations at the 1931 Census, while a similar proportion of males were returned as labourers in secondary industries and services.

A table at p. 732 of the 1937 Year Book shows the numerical and percentage distribution of wage-earners, by age groups, as at the Census of 1931.

Section 2.—The Dominion Department of Labour.

The Department of Labour of the Dominion Government was established in 1900 under the authority of the Conciliation Act. At the outset its chief duties comprised the administration of certain provisions of this statute which were designed to aid in the prevention and settlement of labour disputes, the administration of the Government's fair wages policy for the protection of workmen employed on Dominion Government contracts and on works aided by grants of public funds, the collection and classification of statistical and other information relative to conditions of labour, and the publication of a monthly periodical known as the *Labour Gazette*. From 1900 to 1909 the Department was administered by the Postmaster General, who was also Minister of Labour. It was constituted a separate Department under the Labour Department Act, 1909.

The work of the Department was greatly increased in 1907 by the passage of the Industrial Disputes Investigation Act. At present the Department is also charged with the administration of an Act passed in 1918 known as the Employment Offices Co-ordination Act, the Government Annuities Act of 1908, the Technical Education Act enacted in 1919, the White Phosphorous Matches Act of 1914, the Fair Wages and Hours of Labour Act, 1935, the Vocational Education Act, 1931, the Combines Investigation Act, 1923, as amended in 1935 and 1937, and the Dominion relief legislation. The work of the Department has developed in other directions, especially in the collection and publication of information as to industrial disputes, wages, industrial agreements, prices, industrial accidents, labour legislation and labour organization; also in connection with the International Labour Organization of the League of Nations. For the operation of the Government Annuities Act and the Technical Education Act, see the chapters on Insurance and Education, respectively.

Industrial Disputes Investigation Act.—The Industrial Disputes Investigation Act (R.S.C., 1927, c. 112) has attracted considerable favourable attention from legislators and publicists throughout the world. As enacted in 1907, it forbids strikes and lockouts in mines and certain public utility industries until the matters in dispute have been dealt with by a board of conciliation and investigation consisting of three members, two appointed by the Minister of Labour on the recommendation of the respective parties to the dispute, the third on the recommendation of the first two, or, if they fail to agree, by the Minister himself. Should either of the parties fail to nominate a board member, the Minister may appoint a fit person on its behalf. After such a board has made its report, either of the parties to the dispute may reject its findings and declare a strike or a lockout, a course adopted, however, only in a small percentage of cases. The machinery of the Act may be extended to other industries with the consent of the parties concerned.

In January, 1925, a judgment was rendered by the Judicial Committee of the Privy Council declaring that the Act as it stood was not within the competence

of the Dominion Parliament.* At the ensuing session of Parliament amendments were made to the statute with the object of limiting its operation to matters not within exclusive provincial jurisdiction. It was also provided by these amendments that the statute should apply in the case of "any dispute which is within the exclusive legislative jurisdiction of any province and which by the legislation of the province is made subject to the provisions of this Act". The legislatures of all provinces except Prince Edward Island took advantage of this provision and enacted enabling legislation by which the Dominion Industrial Disputes Investigation Act became operative in respect of disputes of the classes named in the Dominion law and otherwise within exclusive provincial jurisdiction. In December, 1937, however, a statute entitled "Industrial Conciliation and Arbitration Act" was enacted by the British Columbia Legislature providing provincial machinery for dealing with industrial disputes within the legislative jurisdiction of the province and repealing the "Industrial Disputes Investigation (British Columbia) Act".

A review of the proceedings under the Industrial Disputes Investigation Act from its enactment in March, 1907, to Mar. 31, 1937, shows that, during the 30 years, 866 applications were received for the establishment of boards of conciliation and investigation, as a result of which 557 boards were established. In all but 39 cases, strikes or lockouts were averted or ended.

Fair Wages Branch.—The Fair Wages Branch of the Department of Labour is charged with the preparation and enforcement of the labour conditions and schedules of minimum wage rates which are inserted in Dominion Government contracts for works of construction, remodelling, repair or demolition. The number of fair wages schedules prepared from the time the Fair Wages Policy was adopted by the Dominion Government in 1900 up to the end of the fiscal year 1936-37 was 7,517. The number of fair wages schedules furnished during the fiscal year 1936-37 was 512.

The Department of Labour also co-operates closely with other Departments of the Government in ensuring the observance of fair wages conditions inserted in contracts for the manufacture of various classes of equipment and supplies for Government use, and is frequently consulted by other Departments regarding the prevailing rates of wages to be observed on works carried out by day labour.

The Fair Wages Policy of the Government of Canada was originally based on a resolution adopted by the House of Commons in 1900. It was later expressed in an Order in Council adopted on June 7, 1922, amended on Apr. 9, 1924, and again on Dec. 31, 1934. Under these Orders in Council certain specified conditions were designated as being applicable to contracts for building and construction operations, and other conditions as being applicable in the case of contracts for the manufacture of certain classes of Government equipment and supplies. The policy required that the current wage rates and working hours of the district should be observed in the case of all workmen employed, or, if there were no current rates or hours in existence, then fair and reasonable conditions should be observed in both respects. Contracts for railway construction to which the Dominion Government has granted financial aid, either by way of subsidy or guarantee, are likewise subject to fair wages conditions. The policy has, moreover, been extended within recent years to cover contracts for works carried out by the several Harbour Commissions and by the National Harbours Board which replaced them.

* See p. 241 of the *Labour Gazette* for February, 1925, for text of judgment of the Judicial Committee of the Privy Council in regard to the validity of this statute.

On May 30, 1930, an Act of Parliament was adopted known as the Fair Wages and Eight Hour Day Act, 1930, providing for the payment of current wage rates to all persons employed on contracts made with the Government of Canada for works of construction, remodelling, repair or demolition, provided that the wages in all cases should be fair and reasonable. This statute also directed that the working hours of persons while so employed should not exceed eight hours a day. It was further declared that the foregoing conditions were to be applied to all workmen employed by the Government itself on the construction, remodelling, repair or demolition of any work.

The Fair Wages and Eight Hour Day Act, 1930, was superseded, however, on May 1, 1936, by the Fair Wages and Hours of Labour Act, 1935, which was adopted by Parliament on June 28, 1935. This latter statute re-enacts a number of the sections of the former Act and adds new provisions to comply with the recommendations of the Royal Commission on Price Spreads. Like its predecessor, the Act makes provision for fair wages and an eight-hour day on Government contracts for works of construction, remodelling, repair or demolition, imposing, however, a limit of forty-four hours a week on such works and extending the Dominion Government's policy of fair wages and an eight-hour day to works carried out by any provincial or municipal authority with the aid of Dominion Government funds, as well as to other works aided by the Government of Canada.

The Act sets out that the term 'fair wages' means such wages as are generally accepted as current for competent workmen in the district in which the work is being performed for the character or class of work in which such workmen are respectively engaged; but shall in all cases be such wages as are fair and reasonable.

The benefits of the Fair Wages Policy apply also to workmen employed by Government Departments on a day labour basis in building and construction works.

On Mar. 27, 1930, an Order in Council was passed providing that, except in cases where the work of employees was intermittent in character, or the application of the rule was not deemed to be practicable, or in the public interest, the hours of work of any Dominion Government employees who had up to that time been required to work more than eight hours daily should be reduced to eight hours a day, with a half-holiday on Saturday.

An Order in Council was adopted on Dec. 31, 1934, rescinding the labour conditions previously applied to contracts for the manufacture of various classes of government supplies, and substituting other conditions therefor. The provision for the payment of wages not less than current rates, or fair and reasonable rates if there are no current rates, is retained in the new conditions, but with the added proviso that in no event shall the wage rate for male workers 18 years of age or over be less than 30 cents an hour, and for female workers 18 years of age or over, 20 cents an hour. It is also declared that males and females under 18 years of age shall be entitled to rates of wages not less than those provided for women and girls in the minimum wage scales of the respective provinces, and that, in any cases where the provincial minimum wage laws require the payment of higher wages than those set out above, such higher rates shall apply in the execution of Dominion contract work.

Labour Gazette.*—Since the establishment of the Department of Labour in 1900, a monthly publication known as the *Labour Gazette* has been issued. From its inception the *Labour Gazette* has maintained a continuous record of industrial,

* A charge of 20 cents per annum, postage prepaid, is made for this publication to subscribers in Canada, the United States of America, and Mexico, and of \$1.00 per annum to subscribers in all other countries.

social, and economic conditions in Canada, as reflected in legislation, employment and unemployment, price trends, labour disputes, conventions and recommendations of labour organizations, and industrial relations programs. One of the particular functions of the Department is the promotion of industrial harmony, and prominence is therefore given in the *Labour Gazette* to proceedings under the Industrial Disputes Investigation Act and the Conciliation and Labour Act. Complete information is also given with respect to proceedings under other measures administered by the Department, including the Employment Offices Co-ordination Act, the Combines Investigation Act, the Technical Education Act, the Government Annuities Act, the Relief Acts, and the Fair Wages and Eight Hour Day Act.

Included in the statistical information published is a monthly analysis of prices, wholesale and retail, in Canada, indicating trends in the cost of living, the prices of staple articles, and index numbers of price movements over a series of years. A special section records the work of the International Labour Organization (League of Nations), the draft conventions and recommendations adopted by that body being published in full.

The *Labour Gazette* is widely distributed throughout Canada, and the statistical and other information contained therein is constantly used in connection with the discussion of wages and other issues between employers and workers.

Labour Legislation.—The Department gives considerable attention to labour legislation in Canada and abroad. Notes and articles are published in the *Labour Gazette* and special bulletins in printed or mimeographed form are issued from time to time. While each of these deals with some particular phase of labour legislation in the Dominion or in some of the provinces, information is usually given concerning legislation on the same subject in other countries.

Since 1917, the Department has published a series of reports on labour legislation in Canada. Three reports reproduced the text or a summary of all the labour legislation in force at the ends of the years 1915, 1920, and 1928, respectively. The report for 1937 also covers all the Dominion and provincial legislation on the statute books at the end of that year. The reports for the intervening years relate only to the laws enacted during the year.

Section 3.—Provincial Labour Departments and Bureaus.

The rapid industrial development at the end of the nineteenth century in Quebec and Ontario, the leading manufacturing provinces, brought with it the recognition of the need of special provincial offices to safeguard the interests of labour, with the result that the Ontario Bureau of Labour was established in 1900 and the Quebec Department of Public Works and Labour in 1905. In 1904, an Act was passed in New Brunswick providing for a Bureau of Labour, but this never became operative. Some years later, to cope with conditions created by the growth of industry in the West, Acts were passed providing for the creation of Provincial Bureaus of Labour in Manitoba (1915), in Saskatchewan (1920), and in Alberta (1922), while a Department of Labour was established in British Columbia in 1917. A Department of Labour was established in Nova Scotia by c. 3 of the Statutes of 1932, and the Manitoba Bureau of Labour became a Department in 1934. All these authorities publish annual reports on their activities.

The Nova Scotia Department of Labour.—The Act establishing the Nova Scotia Department of Labour provides that "the Department of Labour shall take cognizance of all matters relating to labour and shall administer such affairs, matters,

Acts and regulations as the Governor in Council from time to time assigns to that Department, whether or not the same have been assigned or have belonged by or under any Act of the Legislature of Nova Scotia or otherwise to some other Department or to some member of the Executive Council”.

The Department is in charge of a Minister of Labour, who has under him a Deputy Minister of Labour. The latter is empowered to collect and publish information and statistics affecting labour, and to administer such Acts as may be assigned to the Department by Order in Council. At present, labour bureaus in the province, the administration of the Factories Act, Minimum Wage Board, Limitation of Hours Board, Industrial Standards Act, Trade Union Act as affects check-off, and unemployment relief have been assigned by Order in Council to the Department of Labour.

The Quebec Department of Labour.—This Department was formerly known as the Department of Public Works and Labour, each division having a separate Deputy Minister, but in 1931 each division was recognized as a distinct Department.

The duties of the Department of Labour include the institution and control of inquiries into important industrial questions and it may collect useful facts and statistics relating thereto, to be transmitted to the Quebec Bureau of Statistics. The Department is charged with the administration of provincial Acts respecting industrial and commercial establishments, trade disputes, and the maintenance of fair wages clauses in Provincial Government contracts. The Quebec Workmen's Compensation Commission is under its jurisdiction, together with the Provincial Employment Service.

The Department is responsible for the licensing and qualification of electricians, moving-picture machine operators, stationary enginemen and firemen, and pipe mechanics; it is also charged with the inspection of electrical installations, heating installations, steam, hot-water and hot-air furnaces, boilers registered under the Interprovincial Code, together with the registering of blue prints in connection with the construction of boilers. A special branch of the Department is entrusted with the inspection of public buildings and the approval of the plans of new buildings.

The Department, since the 1934 session, was charged with the enforcement of the Collective Labour Agreements Extension Act which has been repealed and replaced during the 1937 session by the Act respecting Workmen's Wages. However, this new legislation, while an improvement, carries out the policy of the earlier Act. It is not the duty of the Government to lead employers and employees into the preparation of agreements, but when a collective labour agreement has been passed and adopted by the Lieutenant-Governor in Council, a joint committee is formed to supervise the enforcement of the Order in Council. The joint committee, under the authority of the Act, may adopt regulations for its own administration, render obligatory the certificate of competency in a given trade in cities of more than 5,000 population and collect an assessment, not exceeding one-half of one per cent, on the payrolls of employers and on the wages of employees for the purposes of the putting into force of the Order in Council. During the fiscal year 1936-37, 57 collective labour agreements were enforced in the province in various industries.

In order to supply the needs of unorganized trades wherein collective labour agreements could not be entered into, the Fair Wage Act was adopted in 1937. The Fair Wage Board, created under its authority, is a permanent arbitration tribunal having the powers and rights of a corporation. It may determine even

on its own initiative, for the periods of time fixed by it, for the territories it may designate and for any category of employees it may indicate, fair wages, working hours, and, in general, deal with any matter pertaining to employment. However, this Act does not affect collective labour agreements in force or which may become compulsory thereafter. It replaced the former Women's Minimum Wage Act which, of course, was only devoted to the welfare of women.

The 1937 session has given fresh life to the Old Age Pension Act adopted in 1936 according to the Dominion Old Age Pension Legislation; a commission is formed to supervise the carrying out of this Act and since September 1936, it is placed under the jurisdiction of the Department of Labour.

An Act respecting the welfare of youth authorizes the Lieutenant-Governor in Council to prohibit work by boys and girls under 16 years of age in industrial or commercial establishments designated by him and, with respect to such dangerous work as he may designate, the employment of boys and girls of less than 18 years of age.

Allowances to needy mothers will be granted in virtue of the Act to provide such assistance. The Old Age Pension Commission, which is entrusted with the carrying out of this social legislation, is also the organization supervising the enforcement of the Blind Persons Aid Act. Blind men and women over 40 years old are now in receipt of an allowance.

The Department has jurisdiction over the limitation of hours of work; since the coming into force of the Act giving it authority, hours of labour in the building trades have been limited to 44 and 48 per week throughout the province.

Since September, 1936, the Department of Labour has been charged with the control of unemployment relief in the province; such service was formerly under the jurisdiction of the Department of Public Works.

The Department issues qualification certificates to workmen charged with the use and handling of explosives and is responsible for the enforcement of the Scaffolding Inspection Act in towns where there is no municipal service providing for such duties.

The Department of Labour of Ontario.—The Department of Labour of Ontario was established in 1919 and placed under the direction of a Minister and a Deputy Minister of Labour. This Department had its origin in the Bureau of Industries formed in 1882 under the Department of Agriculture, to collect and publish statistics relating to the industries of the province and (later) to administer the first Factory Act of 1886. In 1900 a Bureau of Labour, attached to the Department of Public Works, was authorized to collect and publish information relating to employment, wages and hours, strikes, labour organizations, and general conditions of labour. Several investigations were made regarding such matters and the first free employment offices were opened by the Bureau of Labour. In 1916 this Bureau was in turn superseded by the Trades and Labour Branch, also under the Ministry of Public Works but administered by a Superintendent. The establishment of the Branch had been recommended by the Ontario Commission on Unemployment and the expansion of the work undertaken by the Branch, and the increase in the demands made upon its resources led to the creation of a special Department of the Government by the Department of Labour Act, 1919.

The Department of Labour administers the following Acts: the Department of Labour Act; the Factory, Shop and Office Building Act; the Steam Boiler Act; the Operating Engineers Act; the Building Trades Protection Act; the Employment Agencies Act; the Apprenticeship Act; the Regulations respecting the Protection of

Persons working in Compressed Air; the Regulations respecting the Protection of Persons working in Tunnels and Open Caissons; the Minimum Wage Act, 1937; the Industrial Standards Act; the One Day's Rest in Seven Act; and the Government Contracts Hours and Wages Act.

The Minimum Wage Act, 1937, revises the former Minimum Wage Act as it applies to female workers and extends the scope of the Act to include male employees. Pursuant to an amendment to the Department of Labour Act, the Industry and Labour Board was established in 1937. It consists of five members, one of whom is chairman and three of whom are officers of the Department of Labour. One member is a woman. The Board has power to administer the provisions of any Act assigned to it, and the Minimum Wage Act, 1937, the Apprenticeship Act, and the Industrial Standards Act have been assigned for administrative purposes.

The Department is required to maintain employment offices, to collect information respecting employment, sanitary and other conditions in work places, wages and hours of work, and to study labour legislation in other parts of the British Empire and in foreign countries, as well as any suggested changes in the labour laws of Ontario. The representatives of the Department of Labour have right of access to offices, factories, and other work places at any reasonable hour, and may be authorized to hold inquiries under the Public Inquiries Act. The Department publishes annual reports which cover the work of the officers employed in the administration of the various Acts assigned to it.

The Manitoba Department of Labour.—The Act of 1915, establishing the Manitoba Bureau of Labour, provided that it be attached to the Department of Public Works; an amendment of 1922, however, provided for its attachment to any other Department as the Lieutenant-Governor in Council may determine. The Bureau was created a separate Department by c. 28 of the Statutes of Manitoba, 1931, but the Act was not proclaimed until July 6, 1934.

The Department is charged with the administration of the following Acts: the Bureau of Labour Act; the Manitoba Factories Act; the Bake Shop Act; the Shops Regulation Act; the Minimum Wage Act; the Elevator and Hoist Act; the Steam Boiler Act; the Building Trades Protection Act; the Public Buildings Act; the Fair Wage Act; the Electricians' Licence Act; the Amusements Act (Secs. 11 to 15); the One Day's Rest in Seven Act; the Employment Bureau Act; The Strikes and Lockouts Prevention Act.

The Bureau of Labour and Fires Prevention Branch is a sub-department of the Department of Labour (formerly a sub-department of the Department of Public Works). The Bureau also enforces the Fires Prevention Act.

The Saskatchewan Bureau of Labour and Public Welfare.—This Bureau was created by an Act of 1934 to replace the Department of Railways, Labour and Industries. It is administered by the Minister of Municipal Affairs, assisted by a permanent Commissioner. The function of the Bureau is to administer matters relating to the relief of distress in addition to the following Acts: the Factories Act; the Building Trades Protection Act; the Employment Agencies Act; the One Day's Rest in Seven Act; the Weekly Half-Holiday Act; the Minimum Wage Act; the Workmen's Wage Act and the Industrial Standards Act. It is also charged with the operation of public free employment offices; the collection and publication of information and statistics relating to employment; wages and hours of labour throughout the province; strikes and other labour difficulties; trade unions and labour organizations; the relations between capital and labour, and other subjects connected with industrial problems; the commercial, industrial, and sanitary conditions of employment.

The Alberta Department of Trade and Industry.—This Department supervises the administration of the following Acts: the Minimum Wage Act, 1925, relating to the wages of women workers; the Male Minimum Wage Act; the Industrial Standards Act; the Alberta Trades Disputes Act; the Factories Act; the Theatres Act; the Trade Schools Act; and the Qualification of Tradesmen Act. The Department of Health has the administration of the Alberta Employment Offices Act as well as measures for unemployment relief.

The British Columbia Department of Labour.—This Department was instituted by an Act of 1917, under a Minister and Deputy Minister of Labour. It administers the laws of British Columbia affecting labour, and is empowered to collect information respecting industries, wages, employment, prices, labour organizations, and other data pertaining to labour problems. Prominent among the Acts administered by the Department are: the Male Minimum Wage Act 1934; the Female Minimum Wage Act 1934; the Hours of Work Act 1934. These are administered by the Board of Industrial Relations, the Deputy Minister of Labour being Chairman of the Board. Other activities of the Department include the administration of: the Semi-monthly Payment of Wages Act; the Factories Act; the Apprenticeship Act; the Trade-Schools Regulation Act; the Industrial Conciliation and Arbitration Act 1937; and the operation of employment bureaus within the province.

Section 4.—Canada and the International Labour Organization.*

The International Labour Organization of the League of Nations was set up in 1919 in accordance with Part XIII of the Treaties of Peace to promote the improvement of industrial conditions by legislative action and international agreement.

The Organization comprises the International Labour Conference, which meets annually and is composed of four representatives of each Member State, two of whom are government delegates, while two represent employers and workers respectively, and the International Labour Office in Geneva, which functions as a secretariat of the annual conference and also collects and publishes information on subjects relating to industrial life and labour. The Office is under the control of a Governing Body, consisting of 32 persons, appointed by the International Labour Conference, of whom 16 represent governments, 8 represent employers and 8 represent workers. In addition to its control of the Labour Office, the Governing Body is charged with the preparation of the agenda of the annual conference.

Under the terms of the Peace Treaties, eight of the government seats on the Governing Body are held by the countries of "chief industrial importance". Canada has been designated by the Council of the League of Nations as one of these eight States of chief industrial importance. Sixty-one countries are members of the International Labour Organization, comprising all of the industrial states of the world with the exception of Germany. The United States, although not a member of the League of Nations, joined the International Labour Organization in 1935, as did also Russia. Egypt, which was not a member of the League, also joined the International Labour Organization in 1936. Dr. W. A. Riddell, who had served as Canadian Advisory Officer to the League of Nations in Geneva since 1924, was transferred to the staff of the Canadian Legation in Washington in the autumn of 1937 and was replaced by Mr. H. Hume Wrong, who had previously served as Counsellor of the Canadian Legation in Washington since its establishment in 1927. At the triennial election of the Governing Body of the International Labour Office in

* On this subject see also the 1921 Year Book, pp. 607-609; 1922-23 Year Book, pp. 704-707; and 1924 Year Book, pp. 666-670.

1937, Mr. P. M. Draper, the President of the Trades and Labour Congress of Canada, was elected as a deputy member of the workers' representatives on this body.

The conclusions of the International Labour Conference are cast in the form of draft conventions or recommendations, addressed to the national governments which comprise the membership of the International Labour Organization. A two-thirds majority of the Conference is required for the adoption of either a draft convention or recommendation. Under the Treaties of Peace, the Member States are bound to bring the draft convention or recommendations before the authority or authorities within whose competence the subject matter lies, for the enactment of legislation or other action. Thus the findings of the Conference become binding in the various countries concerned only if and when action regarding them is taken by the latter.

The Dominion Department of Labour is entrusted with the duties arising out of the relations of Canada with the International Labour Organization. These have entailed much correspondence, not only with the International Labour Organization, but also with the different departments of the Dominion Government, with the provinces, and with employers' and workers' organizations. Replies have also been prepared in the Department of Labour to various questionnaires issued by the International Labour Office. Performance of these duties has necessitated a close study of the different technical questions which have figured on the agenda of the various conferences and at the meetings of the Governing Body.

Twenty-three sessions of the International Labour Conference have been held since its inception in 1919. Sixty-one draft conventions and 56 recommendations have been adopted at these annual gatherings. The draft conventions and recommendations of the Conference have, among other subjects, related to the following: hours of labour, measures for the avoidance of unemployment, employment conditions of women and children, employment conditions of seamen, employment in agriculture, weekly rest, statistics of immigration and emigration, principles of factory inspection, inspection of emigrants on board ship, workmen's compensation for accidents and occupational diseases, social insurance, minimum wages, prevention of accidents to dockers, forced labour, holidays with pay, and regulation of hours of work of salaried employees and of workers in coal mines.

Up to Dec. 31, 1937, 742 ratifications of these conventions had been registered with the League of Nations, of which 11 were conditional or with delayed application; 40 had been approved by the competent national authority; and 136 had been recommended to the competent national authority for approval.

Canadian Action on Draft Conventions and Recommendations.—Seven draft conventions in all have been ratified by the Dominion Government, namely: (1) minimum age for employment of children at sea; (2) unemployment indemnity for seamen in case of the loss or foundering of a ship; (3) minimum age for employment as trimmers and stokers; (4) medical examination of children and young persons employed at sea; (5) limiting hours of work in industrial undertakings to eight in the day and forty-eight in the week; (6) weekly rest in industrial undertakings; and (7) creation of minimum-wage-fixing machinery. The first four of these conventions were ratified in March, 1926, following the adoption of legislation by Parliament to give effect to the proposals which were respectively involved. The last three conventions were ratified in March, 1935, following the adoption of legislation by Parliament on these respective subject matters, *i.e.*, hours of labour, weekly rest and minimum wages. Doubts having arisen as to the legal competence of the Dominion Parliament to deal with these matters, a reference was submitted

to the Supreme Court of Canada, which was later carried in appeal to the Judicial Committee of the Privy Council. The judgments of the latter body, given in January, 1937, were to the effect that all three of these statutes were *ultra vires* of the Parliament of Canada.

At the 1935 session of Parliament resolutions were also adopted approving of three other draft conventions of the International Labour Conference with a view to their subsequent ratification, namely: seamen's articles of agreement; safety of workers engaged in loading and unloading ships; and the marking of weights on heavy packages transported by vessel.

Section 5.—Organized Labour in Canada.

The Dominion Department of Labour publishes annually a report on labour organization in Canada. This report outlines the composition and development of the various organizations of wage-earners in the Dominion, and gives statistical and other information respecting membership, benefits, registration of trade unions, etc.

Total Reported Membership of Organized Labour in Canada.—The numerical strength of organized labour in Canada at the close of 1936 was given by the Department of Labour as follows: international organizations, 1,896 local branches with an aggregate membership of 174,769; Canadian central labour bodies, 740 branches and 83,841 members; independent units, 60 with 18,863 members; National Catholic unions, 190 with 45,000 members; grand total, 2,886 local branches and 322,473 members. As compared with 1935 this represents an increase of 158 branches, and of 41,769 members. Table 4 shows, by years, the membership of trade unions in Canada since 1911.

4.—Membership of Trade Unions in Canada, 1911-36.

Year.	Members.	Year.	Members.	Year.	Members.
1911.....	133,132	1920.....	373,842	1929.....	319,476
1912.....	160,120	1921.....	313,320	1930.....	322,429
1913.....	175,799	1922.....	276,621	1931.....	310,544
1914.....	166,163	1923.....	278,092	1932.....	283,576
1915.....	143,343	1924.....	260,643	1933.....	286,220
1916.....	160,407	1925.....	271,064	1934.....	281,774
1917.....	204,630	1926.....	274,604	1935.....	280,704
1918.....	248,887	1927.....	290,282	1936.....	322,473
1919.....	378,047	1928.....	300,602		

Main Groups.—The following paragraphs outline the main groups into which Canadian labour organizations now fall.

Trades and Labour Congress of Canada.—The Trades and Labour Congress is representative of the international trade union movement in the Dominion, the bulk of its membership being drawn from the international organizations which have local branches in Canada. According to reports for 1936, the Congress had in affiliation the Canadian membership of 62 international bodies and the membership of 4 national organizations as well as that of 98 directly chartered unions, the combined membership being 149,398, comprised in 1,679 local branches.

All-Canadian Congress of Labour.—The All-Canadian Congress of Labour was organized in Montreal, Mar. 16, 1927, by representatives of national and independent organizations. At the close of 1936, the All-Canadian Congress of Labour had 6 central bodies in affiliation, with a combined membership of 27,489, as well as 42 directly chartered local unions with a membership of 3,894, making a total combined reported membership of 31,383.

Canadian Federation of Labour.—Following a disagreement among the executive of the All-Canadian Congress of Labour prior to the scheduled convention of that body in September, 1936, a new organization was formed under the name of Canadian Federation of Labour. At the close of 1936, according to available information, the Federation was composed of 5 directly chartered unions, of which the membership was not reported, and in addition 6 central organizations, embracing 60 local branches, with a combined reported membership of 25,081.

Federation of Catholic Workers of Canada.—In 1918, a conference of National Catholic Unions, which were first established in 1901, was held in Quebec city, followed by other meetings in Three Rivers in 1919 and Chicoutimi in 1920. The delegates at the latter conference, numbering 225 from 120 unions, decided to establish a permanent central body to co-ordinate the work of the scattered units. Accordingly, at the 1921 conference held in Hull, at which approximately 200 delegates representing 89 unions were present, a constitution to govern the new body was approved. The name selected was "Federation of Catholic Workers of Canada", and permanent officers were elected, the constitution and by-laws becoming effective on Jan. 1, 1922. From information at hand, there were at the close of the year (1936) 190 National Catholic Unions, with a combined membership of 45,000.

One Big Union.—At a conference held at Calgary, Alberta, Mar. 13, 1919, by representatives of local trade unions, principally from the four western provinces, the One Big Union was established as an industrial organization. According to information supplied by the general secretary, the O.B.U., at the close of 1936, had 44 units under charter, as well as 2 central labour councils (bodies similar to trades and labour councils), the combined reported membership being 23,745.

International Trade Unions Operating in Canada.—Table 5 gives the names of the 87 international craft labour organizations and the 1 industrial union which now carry on operations in Canada, and shows: (1) the number of branches which were in existence in the Dominion at the close of 1936, and (2) the reported membership.

5.—International Trade Unions Operating in Canada, showing Numbers of Branches and Members, December, 1936.

International Organization.	Number of Branches in Canada.	Reported Members in Canada.
American Federation of Labor.....	9	237
Asbestos Workers, International Association of Heat and Frost Insulators, and..	1	7
Automobile Workers of America, International Union United.....	2	6,000
Bakery and Confectionery Workers' International Union of America.....	10	350
Barbers' International Union of America, Journeymen.....	22	622
Bill Posters and Billers of America, International Alliance of.....	1	10
Blacksmiths, Drop Forgers and Helpers, International Brotherhood of.....	18	880
Boilermakers, Iron Shipbuilders and Helpers, International Brotherhood of....	36	1,880
Bookbinders, International Brotherhood of.....	10	451
Boot and Shoe Workers' Union.....	5	1,306
Brewery, Flour, Cereal and Soft Drink Workers, International Union of the United.....	17	679
Bricklayers', Masons' and Plasterers' International Union of America.....	43	4,540
Bridge, Structural and Ornamental Iron Workers, International Association of..	3	79
Building Service Employees' International Union.....	1	38
Carpenters and Joiners, United Brotherhood of.....	84	4,458
Carvers' Association of North America, International Wood.....	1	14
Cigarmakers' International Union of America.....	3	225
Clothing Workers of America, Amalgamated.....	14	7,000
Commercial Telegraphers' Union of America.....	7	748
Conductors, Order of Sleeping Car.....	1	21
Coopers' International Union of North America.....	1	1
Electrical Workers, International Brotherhood of.....	40	2,057
Elevator Constructors, Operators and Starters, International Union of.....	8	423
Engineers, International Union of Operating.....	17	692
Firemen and Oilers, International Brotherhood of.....	40	782

¹ No branches are reported in Canada.

5.—International Trade Unions Operating in Canada, showing Numbers of Branches and Members, December, 1936—concluded.

International Organization.	Number of Branches in Canada.	Reported Members in Canada.
Fire Fighters, International Association of.....	35	2,329
Foundry Employees, International Brotherhood of.....	1	115
Fur Workers' Union, International.....	6	1,547
Garment Workers of America, United.....	7	500
Garment Workers' Union, International Ladies'.....	13	4,836
Glass Bottle Blowers' Association of the United States and Canada.....	4	140
Glass Workers' Union, American Flint.....	5	218
Government Employees, American Federation of.....	1	11
Granite Cutters' International Association of America.....	2	40
Hatters', Cap and Millinery Workers' International Union, United.....	5	1,500
Hod Carriers', Building and Common Labourers' Union of America, International	5	130
Hotel and Restaurant Employees' International Alliance and Bartenders' Inter-		
national League.....	23	2,928
Iron, Steel and Tin Workers of North America, Amalgamated Association of....	13	3,140
Jewellery Workers' Union, International.....	3	441
Lathers, International Union of Wood, Wire, and Metal.....	4	100
Lithographers of America, Amalgamated.....	7	426
Locomotive Engineers, Brotherhood of.....	100	4,659
Locomotive Firemen and Enginemen, Brotherhood of.....	96	4,955
Longshoremen's Association, International.....	20	1,500
Machinists, International Association of.....	77	7,500
Maintenance-of-Way Employees, Brotherhood of.....	194	12,109
Marble, Stone and Slate Polishers, Rubbers and Sawyers, Tile and Marble		
Setters' Helpers and Terrazo Workers' Helpers, International Association of	3	66
Metal Polishers' International Union.....	2	384
Metal Workers' International Association, Sheet.....	13	486
Mine, Mill and Smelter Workers, International Union of.....	12	30
Mine Workers of America, United.....	66	16,600
Moulders' Union of North America, International.....	27	1,369
Musicians, American Federation of.....	28	5,000
Painters, Decorators and Paperhangers of America, Brotherhood of.....	25	903
Paper Makers, International Brotherhood of.....	25	1,783
Pattern Makers' League of North America.....	5	171
Paving Cutters' Union of the United States and Canada.....	5	100
Photo-Engravers' Union of North America, International.....	5	404
Plasterers' and Cement Finishers' International Association, Operative.....	11	357
Plumbers, Gas and Steam Fitters, United Association of Journeymen.....	34	2,400
Pocketbook Workers' Union of the United States of America and Canada, Inter-		
national.....	2	500
Printers', Die Stampers' and Engravers' Union, International Plate.....	1	35
Printing Pressmen and Assistants' Union, International.....	18	1,458
Pulp, Sulphite and Paper Mill Workers of the United States and Canada, Inter-		
national Brotherhood of.....	29	5,000
Quarry Workers' International Union of North America.....	1	48
Railroad Signalmen of America, Brotherhood of.....	10	225
Railroad Telegraphers, Order of.....	13	5,000
Railroad Trainmen, Brotherhood of.....	92	10,929
Railway and Steamship Clerks, Freight Handlers, Express and Station Employ-		
ees, Brotherhood of.....	88	5,959
Railway and Motor Coach Employees of America, Amalgamated Association of		
Street, Electric.....	23	6,769
Railway Carmen of America, Brotherhood of.....	112	10,942
Railway Conductors, Order of.....	67	2,385
Retail Clerks, International Protective Association.....	4	25
Roofers, Damp and Waterproof Workers' Association, United Slate, Tile and		
Composition.....	1	26
Rubber Workers of America, International United.....	1	21
Seamen's Union, International.....	2	124
Siderographers, International Association of.....	1	8
Stage Employees and Moving Picture Machine Operators, International Alliance		
of Theatrical.....	36	900
Stereotypers' and Electrotypers' Union, International.....	10	346
Stonecutters' Union of North America, Journeymen.....	15	500
Switchmen's Union of North America.....	6	81
Tailors' Union of America, Journeymen.....	4	155
Teamsters, Chauffeurs, Stablemen and Helpers, International Brotherhood of....	17	1,545
Textile Workers of America, United.....	5	300
Train Despatchers' Association, American.....	1	15
Typographical Union, International.....	49	4,246
Upholsterers', Carpet and Linoleum Mechanics' International Union.....	3	350
Totals.....	1,885	170,569
Industrial Workers of the World.....	11	4,200
Grand Totals.....	1,896	174,769

¹ No branches are reported in Canada.

Table 6 gives the numbers of branches and the membership of Canadian central labour bodies operating in Canada at the close of 1936.

6.—Canadian¹ Central Labour Bodies Operating in Canada, showing Numbers of Branches and Members, December, 1936.

Organization.	Number of Branches or Affiliations.	Members Reported.
Algoma Steel Workers' National Union.....	1	2,200
All-Canadian Congress of Labour.....	42	3,894
Building Workers of Canada, Amalgamated.....	31	9,000
Canadian Brotherhood of Ships' Employees.....	3	4,500
Canadian Federation of Labour.....	5	1
Canadian Federation of Musicians ²	8	530
Carpet Weavers' Beneficial Association, Canadian Brussels ¹	6	170
Civil Servants of Canada, Amalgamated.....	40	3,910
Civil Service Association of Alberta.....	11	1,204
Electrical Communication Workers of Canada ³	2	28
Electrical Trades Union, Canadian.....	4	620
Engineers, Canadian Association of Stationary.....	21	619
Express Employees, Brotherhood of.....	27	1,398
Fire Fighters, Provincial Federation of Ontario.....	7	106
Letter Carriers, Federated Association of.....	57	1,684
Marine Engineers of Canada, National Association of.....	16	633
National Union of Operating Engineers ³	1	202
Native Brotherhood of British Columbia.....	16	727
One Big Union ³	44	23,745
Postal Employees, Canadian.....	26	957
Printing Trades Union, Canadian National ³	1	146
Railway Employees, Canadian Brotherhood of.....	162	11,668
Railway Mail Clerks' Federation, Dominion.....	18	895
Railwaymen, Canadian Association of.....	76	3,251
Shoe Workers' Union and Allied Crafts, Canadian.....	11	2,350
Trades and Labour Congress of Canada.....	98	8,224
Transport and General Workers of Canada ³	4	430
Victuallers and Caterers' Union, Canadian.....	2	750
Totals.....	740	83,841

¹ The Labour Department's definition of 'Canadian' does not include the National Catholic or Independent Unions with reported memberships of 45,000 and 18,863 respectively. ² Membership not reported.

³ Affiliated with the Canadian Federation of Labour.

Section 6.—Fatal Industrial Accidents.

Statistics of fatal industrial accidents have been compiled by the Dominion Department of Labour since 1903, the data being obtained from provincial Workmen's Compensation Boards, the Board of Railway Commissioners for Canada and various other governmental authorities, from departmental correspondents and from press clippings. Table 7 shows the numbers of fatal industrial accidents reported to the Department during each year from 1933 to 1937, inclusive. The number of fatalities in each of the different industries is also shown as a percentage of the total number. Preliminary figures show 1,209 fatal accidents in 1937.

7.—Fatal Industrial Accidents in Canada, by Industries, 1933-37.

Industry.	Numbers of Fatal Accidents.					Percentages of Fatal Accidents.				
	1933.	1934.	1935.	1936.	1937. ¹	1933.	1934.	1935.	1936.	1937. ¹
Agriculture.....	111	151	124	127	154	13.7	15.1	12.3	11.5	12.7
Logging.....	91	114	116	133	145	11.3	11.4	11.5	12.0	12.0
Fishing and trapping.....	36	47	38	57	50	4.5	4.7	3.7	5.1	4.1
Mining, non-ferrous smelting and quarrying.....	112	144	175	181	198	13.9	14.4	17.4	16.3	16.4
Manufacturing.....	103	103	133	112	154	12.7	10.3	13.2	10.1	12.7
Construction.....	65	118	103	105	164	8.0	11.8	10.2	9.5	13.6
Electric light and power.....	15	20	25	14	22	1.9	2.0	2.5	1.3	1.8
Transportation and public utilities.....	161	165	184	240	214	19.9	16.5	18.2	21.7	17.7
Trade.....	48	52	44	45	45	5.9	5.2	4.4	4.1	3.7
Service.....	63	86	66	89	62	7.8	8.6	6.5	8.0	5.2
Miscellaneous.....	3	Nil	1	4	1	0.4	-	0.1	0.4	0.1
Totals.....	808	1,000	1,009	1,107	1,209	100.0	100.0	100.0	100.0	100.0

¹Figures subject to revision.

Causes of Fatal Accidents.—The classification of fatal accidents in 1937, by causes, shows that the largest number, 385, came under the category “by moving trains, vehicles, etc”. This includes all accidents due to cars or engines, including mine and quarry cars, and to automobiles and other power vehicles and horse-drawn vehicles, as well as moving implements, water craft and aircraft.

“Falling objects” caused 223 fatalities. Next in order as a cause came “falls of persons”, including those (186 in number) who fell into pits, shafts, holds of vessels, harbours, rivers, etc. Fatalities numbering 148 were caused by dangerous substances, including electric current, explosives, hot and inflammable substances, gas fumes, boiler explosions, etc. Animals caused 33 fatalities, including 21 caused by horses. There were 28 fatalities caused by striking against or being struck by objects, 25 by prime movers, 25 by hoisting apparatus, 24 by working machines, 18 by the handling of heavy or sharp objects, and 11 by tools. The heading “other causes” includes 33 caused by lightning, frost, storms, and sunstroke, 31 due to industrial diseases, strain, etc., 18 to cave-ins, etc., 13 caused by shooting and violence, and 5 by drownings not otherwise specified.

Numbers of industrial accidents, fatal and non-fatal, dealt with by the various provincial Workmen's Compensation Boards, are included in the following section on Workmen's Compensation.

Section 7.—Workmen's Compensation in Canada.

An account of the development of workmen's compensation legislation in Canada from employers' liability legislation was given at pp. 744-746 of the 1927-28 Year Book, while a summary of the legislation with regard to workmen's compensation, including a statement of the current scale of compensation in each province, appears in the general sketch of labour legislation in Canada at pp. 787-796 of the current edition. Details regarding the operation of the various Workmen's Compensation Boards of the provinces are given below.

Operations of the Workmen's Compensation Boards.—*Nova Scotia.*—The Workmen's Compensation Act was passed in 1915, but only became effective on Jan. 1, 1917. During the twenty-one years between that date and Dec. 31, 1937, 161,272 accidents were reported to the Board of which 143,413 were compensated as shown in Table 8. Prior to Jan. 1, 1920, medical aid was furnished only in special cases.

8.—Compensation Paid and Accidents Compensated by the Nova Scotia Workmen's Compensation Board, 1917-37.

(Estimates for outstanding claims not included.)

Year.	Compensation.	Medical Aid.	Total.	Accidents Compensated.
	\$	\$	\$	No.
1917.....	503,258	202	503,460	4,837
1918.....	826,740	Nil	826,740	4,931
1919.....	629,156	491	629,647	4,949
1920.....	1,135,235	36,561	1,171,796	7,116
1921.....	705,752	36,296	742,048	4,903
1922.....	576,906	40,147	617,053	5,022
1923.....	808,560	56,484	865,044	6,250
1924.....	874,478	63,974	938,452	5,786
1925.....	638,787	68,740	707,527	5,340
1926.....	875,940	84,122	960,062	6,662
1927.....	1,052,303	88,978	1,141,281	6,880
1928.....	1,076,074	95,069	1,171,143	7,683
1929.....	936,210	117,632	1,053,842	9,479
1930.....	949,828	129,399	1,079,227	8,821
1931.....	951,256	106,578	1,057,834	6,357
1932.....	688,448	84,281	772,729	5,024
1933.....	570,701	69,575	640,276	5,168
1934.....	794,717	113,860	908,577	8,063
1935.....	954,061	130,952	1,085,013	8,971
1936.....	1,160,738	167,255	1,327,993	10,246 ¹
1937.....	1,189,710	190,846	1,380,556	10,925

¹Revised since the publication of the 1937 Year Book.

New Brunswick.—The Workmen's Compensation Act of New Brunswick was passed in 1918. It extends to a wide range of industries, and is administered by a Board of three persons, levying assessments and paying benefits. For the sums paid out annually from 1920 to 1937 as compensation and for medical aid, see Table 9.

9.—Compensation Paid by the New Brunswick Workmen's Compensation Board, 1920-37.

Year.	Weekly Compensation.	Permanent Partial Disability.	Fatal.		Medical Aid.		Permanent Total Disability Reserve.
			Funeral Expenses.	Reserve for Pensions.	Doctors' Fees and Transportation.	Hospital and Nursing Service.	
	\$	\$	\$	\$	\$	\$	\$
1920.....	195,063	73,440	1,799	128,158	39,324	15,606	1
1921.....	159,096	103,054	3,661	188,945	56,631	22,378	1
1922.....	162,988	84,316	2,906	124,068	76,046	31,568	1
1923.....	204,353	90,349	3,573	130,339	83,530	35,935	1
1924.....	203,946	113,555	3,425	162,740	87,261	41,528	1
1925.....	186,946	90,044	2,784	144,285	84,897	38,920	1
1926.....	185,624	76,780	2,033	93,838	73,149	40,293	1
1927.....	211,692	103,430	2,427	88,299	79,481	43,994	1
1928.....	217,890	116,208	3,141	127,490	80,212	51,984	1
1929.....	243,770	99,266	3,388	137,667	85,238	59,217	1
1930.....	199,313	92,344	2,682	116,055	77,722	54,172	6,237
1931.....	181,676	73,774	1,581	72,481	79,021	60,183	1
1932.....	137,762	71,527	1,403	33,280	68,712	46,907	1
1933.....	145,063	103,742	2,126	63,649	88,304	63,572	20,521
1934.....	192,207	80,967	2,104	83,485	110,103	85,724	1
1935.....	195,763	91,382	2,388	86,161	111,470	83,221	10,273
1936.....	247,204	88,596	2,290	106,633	130,266	101,262	9,347 ²
1937 ²	239,974	43,330	2,001	62,770	97,829	79,797	9,346

¹ No reserve reported.² Provisional.

Quebec.—The Quebec Workmen's Compensation Commission was established in 1928 by authority of cc. 79 and 80 of the Statutes of that year. The Act was brought into force by proclamation on Mar. 22, 1928, operations of the Commission commencing as of Sept. 1, 1928. Under this Act, the Quebec Commission did not insure employers against their liability. On Apr. 4, 1931, a new Act was enacted by the Quebec Legislature (21 Geo. V, c. 100), effective Sept. 1, 1931, providing for state insurance, practically along the same lines as the Workmen's Compensation Act of Ontario. This new Act was amended by 23 Geo. V, c. 98, enacted on Apr. 13, 1933; by 25-26 Geo. V, c. 80, enacted on Apr. 11, 1935; by 1 Edw. VIII, cc. 39-40, enacted on Nov. 12, 1936; and by 1 Geo. VI, c. 94, enacted on May 20, 1937. Table 10 shows the operations of the Quebec Commission from Sept. 1, 1928, to Dec. 31, 1937.

10.—Compensation Paid and Accidents Compensated by the Quebec Workmen's Compensation Commission, 1928-37.

Year.	Claims.	Accidents Compensated.	Accident Cost.
	No.	No.	\$
1928 (4 months).....	8,266	2,625	209,764
1929.....	25,610	21,377	3,229,554
1930.....	20,900	19,850	3,792,346
1931 (8 months) Old Act.....	12,534	13,204	2,758,785
1931 (4 months) New Act.....	12,734	12,717	1,237,738
1932.....	34,414	30,643	3,048,055
1933.....	30,462	26,723	2,237,504
1934.....	35,436	31,557	2,579,002
1935.....	40,521	35,163	3,396,413
1936.....	43,838	39,581	3,917,462
1937 ¹	71,000	63,000	5,742,656

¹ Figures subject to revision.

Ontario.—Under the system operated by the Ontario Workmen's Compensation Board in Schedule 1, where the liability is collective, 24 classes of industries pay various percentages of their payrolls annually to the Board, and escape individual civil liability for accidents and certain specified industrial diseases. The percentage of payroll collected by the Board is graded according to the degree of hazard in the occupation and ranged in 1937 from 20 cents per \$100 of payroll in printing to \$14.30 for wrecking and window cleaning. The average for all classes was \$1.39 per \$100 of payrolls which amounted to \$488,259,000. Certain other industries under Schedule 2, including municipal undertakings, railways, car shops, telegraphs, telephones, etc., are made individually liable to pay the rates of compensation fixed under the Act. Employees of the Dominion or of the province, killed or injured in the discharge of their duty, are by special legislation placed on the same footing as those of private employers of the second class.

Statistics of the benefits awarded and the accidents to workers reported during the 23 years of the operation of the Act appear in Table 11. During the year 1937, 66,368 accidents were *paid for*, including 353 cases of death, 20 of permanent total disability, 1,091 of permanent partial disability, 29,806 of temporary disability, and 35,098 in which medical aid only was provided; the latter are all under Schedule 1, as medical aid in Schedule 2 cases and Crown cases is furnished directly by the employer.

11.—Benefits Awarded and Accidents Reported by the Ontario Workmen's Compensation Board, 1915-37.

Year.	Benefits Awarded.				Accidents Reported.			
	Schedule 1.		Schedule 2 and Crown Compensa- tion.	Total Benefits.	Schedule 1.	Schedule 2.	Crown.	Total.
	Compensa- tion.	Medical Aid.						
	\$	\$	\$	\$	No.	No.	No.	No.
1915.....	692,389	1	200,932	893,321	13,878	3,144	11	17,033
1916.....	1,553,653	1	451,710	2,005,363	21,269	4,806	17	26,092
1917.....	2,286,955	83,514 ²	623,556	2,994,025	30,701	5,813	18	36,532
1918.....	2,751,137	369,346	763,511	3,883,995	40,662	7,113	73	47,848
1919.....	2,808,639	386,299	997,923	4,192,860	36,236	7,918	106	44,260
1920.....	5,113,150	703,706	1,963,390	7,780,245	46,177	7,222	1,452	54,851
1921.....	3,858,017	662,794	1,668,452	6,189,264	36,272	7,666	1,253	45,191
1922.....	3,417,102	692,820	1,582,975	5,692,897	42,139	7,124	1,148	50,411
1923.....	4,036,170	788,906	1,348,786	6,173,862	51,655	6,080	3,374	61,109
1924.....	4,052,288	835,956	1,234,576	6,122,820	49,558	4,916	4,201	58,675
1925.....	3,635,530	875,836	1,054,077	5,565,443	50,883	5,079	4,050	60,012
1926.....	3,664,040	988,487	1,168,825	5,821,352	57,032	4,942	3,942	65,916
1927.....	3,930,418	1,062,860	1,091,378	6,084,655	62,063	5,412	4,504	71,979
1928.....	4,565,689	1,166,508	1,335,751	7,067,948	69,011	5,815	4,572	79,398
1929.....	5,346,621	1,385,525	1,280,012	8,012,158	76,029	6,008	5,066	87,103
1930.....	4,942,756	1,336,046	1,144,216	7,423,018	61,490	4,486	3,291	69,267
1931.....	3,917,045	1,060,763	1,043,584	6,021,392	46,069	3,348	3,477	52,894
1932.....	3,202,639	817,240	1,105,741	5,125,621	35,264	2,474	3,732	41,470
1933.....	2,298,788	667,552	732,699	3,699,069	23,227	1,890	2,925	38,042
1934.....	2,745,239	841,738	912,730	4,499,707	44,858	2,244	7,628	54,730
1935.....	3,225,899	1,037,683	1,050,531	5,314,113	50,690	2,208	5,648	58,546
1936.....	3,553,282	1,058,642	1,031,874	5,643,798	55,878	2,515	2,989	61,382
1937.....	3,837,589	1,251,848	1,040,523	6,129,961	64,845	2,554	3,183	70,582

¹No provision for medical aid.

²Half year only.

Manitoba.—Under the Workmen's Compensation Act, effective Mar. 1, 1917, Part I of the Act, dealing with workmen in hazardous occupations, is administered by the Workmen's Compensation Board, which charges insurance rates according to the hazard of the industry, the sums received by the workman being in lieu of the rights of action previously existing. The province, the city of Winnipeg, and certain corporations operating public utilities are permitted by the law to practise self-insurance.

The Workmen's Compensation Board also administers the provisions of the Dominion Act respecting payment of compensation of employees of His Majesty who are killed or suffer injuries while performing their duties, being c. 15 of the Statutes of 1918 and subsequent amendments.

From the date of the coming into force of the Manitoba Workmen's Compensation Act to Dec. 31, 1936, the Board has dealt with 119,103 compensable accidents and paid out \$15,490,867 for compensation and medical aid. Of the accidents in 1936, 4,860 involved medical aid costs only, 4,186 involved temporary and 216 permanent disability, while 37 resulted in death. The figures quoted above and hereunder cover accidents dealt with under both provincial and Dominion legislation.

12.—Compensation Paid and Accidents Compensated by the Manitoba Workmen's Compensation Board, 1917-36.

Year.	Benefits Awarded.			Accidents Compensated. No.
	Compensation.	Medical Aid.	Total.	
	\$	\$	\$	
1917 (10 months).....	289,870	23,002	312,872	1,323
1918.....	304,135	35,121	339,256	1,731
1919.....	286,222	40,748	326,970	1,805
1920.....	399,734	79,885	479,619	2,509
1921.....	708,418	155,295	863,713	3,731
1922.....	691,547	175,206	866,753	5,480
1923.....	686,124	176,826	862,950	5,469
1924.....	516,815	171,441	688,256	5,466
1925.....	591,715	197,378	789,093	5,893
1926.....	649,580	210,010	859,590	7,635
1927.....	644,969	226,173	871,142	7,726
1928.....	858,470	270,868	1,129,338	9,591
1929.....	966,203	285,350	1,251,553	10,449
1930.....	952,760	240,734	1,193,494	8,310
1931.....	670,461	177,552	848,013	6,671
1932.....	636,975	165,969	802,944	5,695
1933.....	456,180	141,536	597,716	5,505
1934.....	562,276	169,598	731,874	6,578
1935.....	572,262	189,829	762,091	8,237
1936.....	702,321	211,307	913,628	9,299

Saskatchewan.—The Workmen's Compensation (Accident Fund) Act became fully effective July 1, 1930, and covers practically all employees in the province except railway employees engaged in the running trades, casual workers, farm and ranch labourers, domestic and menial servants, janitors, retail store employees, and persons who cannot be classed as workmen.

The Act is administered by a Board of three and imposes compulsory collective liability on the employers covered. The schedule of benefits is similar to that provided by other compensation Acts. Table 13 shows the number of accidents and benefits paid to the end of 1936.

13.—Compensation Paid and Accidents Compensated by the Saskatchewan Workmen's Compensation Board, 1930-36.

Year.	Benefits Awarded.			Accidents Compensated. No.
	Compensation.	Medical Aid.	Total.	
	\$	\$	\$	
1930 (6 months).....	131,338	28,434	159,772	2,639
1931.....	308,662	100,748	409,410	3,969
1932.....	255,933	73,398	329,331	2,844
1933.....	224,738	58,099	282,838	2,389
1934.....	207,842	60,029	267,871	3,222
1935.....	245,065	70,670	315,735	3,568
1936.....	357,545	89,930	447,475	4,642

Alberta.—The Workmen's Compensation Act of 1918 became effective Aug. 1, 1918, as regards mining, and Jan. 1, 1919, in respect of almost all industries except agriculture, railroading, and the operation of retail stores and offices. Railroading (except for the running trades) was brought within the scope of the Act in 1919, and a further amendment in 1928 left only conductors and trainmen exempt from the operations of the Act.

Table 14 shows the operations of the Board for the calendar years 1921 to 1936. Of the 12,381 accidents reported in 1936, 39 were fatal and 91 resulted in some permanent injury. The amounts shown below do not include sums transferred to the pension fund, which had assets amounting to \$3,217,085 on Dec. 31, 1936, nor do they include administration expenses nor sums set aside to cover estimated liabilities. The numbers of accidents compensated shown in the last column do not include claims disposed of by payment only of account for medical aid.

14.—Compensation Paid, and Accidents Reported and Compensated by the Alberta Workmen's Compensation Board, 1921-36.

Year.	Benefits Awarded.			Accidents Reported.	Accidents Compensated.
	Compensation.	Medical Aid.	Total.		
	\$	\$	\$	No.	No.
1921.....	253,669	113,433	367,102	7,069	3,566
1922.....	265,326	134,252	399,578	7,518	3,314
1923.....	323,369	161,732	485,101	9,160	4,268
1924.....	241,090	127,397	368,487	7,383	3,627
1925.....	312,990	154,870	467,860	8,355	4,099
1926.....	298,404	124,138	422,542	8,930	4,629
1927.....	371,787	161,537	533,324	10,149	5,547
1928.....	456,526	207,602	664,128	13,400	6,636
1929.....	507,438	265,636	773,074	14,899	7,138
1930.....	498,015	264,780	762,795	12,607	6,091
1931.....	452,643	216,212	668,855	10,049	4,878
1932.....	407,284	203,745	611,029	8,974	4,607
1933.....	291,406	143,675	435,081	8,160	3,398
1934.....	312,092	169,490	481,582	9,608	4,090
1935.....	353,292	205,891	559,183	11,058	4,813
1936.....	436,498	262,801	699,299	12,381	4,834

British Columbia.—The Workmen's Compensation Act, effective Jan. 1, 1917, provides compulsory accident insurance in almost every industrial occupation carried on in the province, protecting in 1936 approximately 135,000 employees with a payroll of almost \$145,000,000. Insurance rates levied against employers are graded according to the hazard of the industry. All employers under the Act are required, in addition, to deduct one cent per day or part thereof from the wages of employees and to remit this money to the Board to the credit of the medical aid fund, which provides all necessary medical, surgical and hospital expenses for injured employees. Silicosis was added as an industrial disease in metal mining commencing Jan. 1, 1936. For figures see Table 15.

15.—Compensation Paid and Accidents Compensated by the British Columbia Workmen's Compensation Board, 1917-36.

Year.	Benefits Awarded.			Claims (gross).
	Compensation.	Medical Aid.	Total.	
	\$	\$	\$	No.
1917.....	603,274	62,668	665,942	13,685
1918.....	1,224,039	268,985	1,493,024	22,498
1919.....	1,394,696	289,108	1,683,804	18,185
1920.....	1,709,759	397,451	2,107,210	20,905
1921.....	1,771,126	431,748	2,202,874	16,883
1922.....	1,767,260	457,196	2,224,456	19,647
1923.....	2,157,918	514,762	2,672,680	24,184
1924.....	2,309,007	602,733	2,911,740	25,566
1925.....	2,419,372	618,942	3,038,314	27,563
1926.....	2,481,456	678,231	3,159,687	30,365
1927.....	2,654,200	643,594	3,297,794	30,066
1928.....	2,898,021	688,446	3,586,467	32,793
1929.....	3,588,626	752,623	4,341,249	36,750
1930.....	3,403,743	773,397	4,177,140	33,285
1931.....	2,572,254	568,289	3,140,543	25,877
1932.....	1,860,021	447,423	2,307,445	19,011
1933.....	1,501,700	368,482	1,870,183	18,274
1934.....	1,590,817	410,126	2,000,943	22,354
1935.....	2,092,389	506,741	2,599,130	26,280
1936.....	2,536,166	595,894	3,132,060	29,677

Section 8.—Strikes and Lockouts.

Statistics of strikes and lockouts in Canada have been collected by the Dominion Department of Labour since its establishment in 1900. Table 16 shows the numbers of disputes, of employees involved in disputes, and the time loss in working days for each year from 1921 to 1937 and the totals for the period 1901-20, inclusive. The items in the columns headed "time loss in man-working days" in the tables following are calculated by multiplying the number of persons directly involved in strikes and lockouts by the number of working days they are so affected during the time the disputes are in existence. Tables 17 and 18 give detailed analyses, by provinces and by industries, for 1936 and 1937.

Summary tables of the figures with details as to strikes and lockouts during 1937 will be found in the *Labour Gazette* for March, 1938, pp. 241-271.

Industrial Disputes in Recent Years.—From 1930 to 1937 the figures as to numbers of strikes and lockouts, numbers of employees involved and time loss were substantially greater than during the period 1926 to 1930, but were still much lower than during the years prior to 1926 when coal-mining strikes involved large numbers of employees and resulted in great time loss. Since 1930 most of the important disputes have been in clothing manufacturing, logging, sawmilling and wood-working industries, with a substantial number in coal mining. In 1937, as in 1936, there were important disputes in textile factories, especially cotton, both in Quebec and Ontario. Other disputes of importance were of coal miners at Stellarton, N.S., and Minto, N.B., lumber mill workers in Miramichi district, N.B., foundry and ship repair workers at Sorel, Que., women's clothing workers at Montreal, Que., automobile workers at Oshawa, Ont., loggers at Flanders, Ont., meat packers at Calgary and Edmonton, Alta., also at Vancouver, B.C. The number of disputes in 1937 was 278 as compared with 156 in 1936, the number of workers involved was 71,905 as compared with 34,182 in 1936, and the time loss 886,393 man-working days as compared with 276,997 in 1936. Table 16 includes figures regarding coal mining, industries other than coal mining, and all industries.

16.—Strikes and Lockouts in the Coal Mining, Other, and All Industries in Canada, calendar years 1921-37.

NOTE.—For the years 1901-20, see the 1933 Year Book, p. 763.

Year.	Coal Mining.			Industries other than Coal Mining.			All Industries.			
	Number of Disputes in Existence During Year.	Number of Workers Involved.	Time Loss in Man-Working Days.	Number of Disputes in Existence During Year.	Number of Workers Involved.	Time Loss in Man-Working Days.	Numbers of Disputes—		Number of Workers Involved.	Time Loss in Man-Working Days.
							In Existence During the Year.	Beginning in the Year.		
Totals, 1901-20..	229¹	138,126¹	5,508,233¹	2,701¹	584,397¹	10,732,592¹	2,939¹	2,863¹	722,523¹	16,240,825¹
1921.....	10	1,456	31,318	158	26,801	1,017,596	168	159	28,257	1,048,914
1922.....	21	26,475	798,548	83	17,300	730,113	104	89	43,775	1,528,661
1923.....	23	20,814	299,539	63	13,447	372,211	86	77	34,261	671,750
1924.....	15	21,201	1,089,484	55	13,109	205,570	70	64	34,310	1,295,054
1925.....	17	18,672	1,040,276	70	10,277	153,005	87	86	28,949	1,193,281
1926.....	16	8,445	35,193	61	15,389	231,408	77	75	23,834	266,601
1927.....	20	16,653	53,833	54	5,646	98,737	74	72	22,299	152,570
1928.....	14	5,033	88,000	84	12,548	136,212	98	96	17,581	224,212
1929.....	8	3,045	6,805	82	9,901	145,275	90	88	12,946	152,080
1930.....	15	6,228	24,183	52	7,540	67,614	67	67	13,768	91,797
1931.....	9	2,129	11,523	79	8,609	192,715	88	86	10,738	204,238
1932.....	33	8,540	132,766	83	14,850	122,234	116	111	23,390	255,000
1933.....	21	3,028	33,019	104	23,530	284,528	125	122	26,558	317,547
1934.....	26	11,461	91,459	165	34,339	483,060	191	189	45,800	574,519
1935.....	17	6,131	61,032	103	27,138	222,996	120	120	33,269	284,028
1936.....	22	8,655	56,766	134	26,157	220,231	156 ¹	155 ¹	34,812	276,997
1937.....	44 ¹	15,477	112,826	234 ¹	56,428	773,567	278	274	71,905	886,393

¹ Revised since the publication of the 1937 Year Book.

Table 17 is a record of industrial disputes by provinces for the years 1936 and 1937. In 1936, the important disputes by provinces and industries were as follows: in Ontario in textile and clothing manufacturing; in British Columbia in fishing, logging and water transportation (longshoremen); in Nova Scotia in coal mining; in Quebec in cotton, silk and dress manufacturing, and in transportation (taxi drivers); in Alberta in coal mining; and in Manitoba in fur and men's work-clothing manufacturing. In 1937 the important strikes by industries were located in the provinces as follows: in Ontario in textile, automobile, furniture, sawmilling, rubber, boot and shoe industries, and water transportation (pulpwood loaders and longshoremen); in Quebec in textile, clothing, meat-packing, foundry and ship repair industries; in Nova Scotia in coal mining; in New Brunswick in coal mining and sawmilling; in Manitoba in fur manufacturing; in Alberta in coal mining and meat packing; in British Columbia in gold mining and meat packing.

17.—Strikes and Lockouts, showing Numbers of Workers Involved and Time Loss, by Provinces, calendar years 1936 and 1937.

Province.	1936.				1937.			
	No. of Disputes.	No. of Workers Involved.	Time Loss.		No. of Disputes.	No. of Workers Involved.	Time Loss.	
			Man-Working Days.	Per cent of Total.			Man-Working Days.	Per cent of Total.
P.E. Island.....	1	20	40	0.0	Nil	—	—	—
Nova Scotia.....	11	7,089	39,315	14.2	43	14,309	51,147	5.8
New Brunswick...	Nil	—	—	—	8	3,642	78,790	8.9
Quebec.....	20	5,922	33,251	12.0	46	24,419	358,024	40.4
Ontario.....	80	11,119	87,955	31.8	130	24,531	320,025	36.1
Manitoba.....	13	2,094	20,057	7.2	11	734	15,629	1.7
Saskatchewan.....	1	4	20	0.0	4	124	990	0.1
Alberta.....	14	2,783	20,987	7.6	17	2,413	15,094	1.7
British Columbia..	15	5,709	75,122	27.1	18	1,583	46,244	5.2
Interprovincial....	1	72	250	0.1	1	150	450	0.1
Totals.....	156	34,812	276,997	100.0	278	71,905	886,393	100.0

Table 18 shows strikes and lockouts by industries during 1936 and 1937, the most important in 1936 occurring in manufacturing (mainly in textiles, clothing, etc.; fur, leather and other animal products; and leather boots and shoes), mining, fishing and trapping, and logging; and during 1937 in manufacturing (mainly in textiles, clothing, etc.; metal products; and miscellaneous wood products), mining, logging, and transportation and public utilities.

18.—Strikes and Lockouts, by Industries, 1936 and 1937.

Industry.	1936.					1937.				
	Number of Disputes.	Workers Involved.		Time Loss.		Number of Disputes.	Workers Involved.		Time Loss.	
		Number.	Per Cent of Total.	Man-Working Days.	Per Cent of Total.		Number.	Per Cent of Total.	Man-Working Days.	Per Cent of Total.
Agriculture	1	1,100	3.1	4,000	1.4	2	78	0.1	58	0.0
Logging	6	2,605	7.5	31,305	11.3	7	3,010	4.2	26,575	3.0
Fishing and Trapping	3	2,840	8.1	40,950	14.8	1	800	1.1	1,600	0.2
Mining, etc.¹	22	8,655	24.9	56,766	20.5	49	17,537	24.4	139,346	15.7
Manufacturing	81	15,061	43.3	125,666	45.4	145	46,344	64.4	687,510	77.6
Vegetable foods, etc.....	8	518	1.5	2,176	0.8	9	509	0.7	1,629	0.2
Tobacco and liquors.....	2	—	—	—	—	3	257	0.3	1,554	0.2
Rubber products.....	1	—	—	—	—	5	1,370	1.9	27,880	3.1
Animal foods.....	2	293	0.8	460	0.2	4	950	1.3	27,800	3.1
Boots and shoes (leather).....	4	405	1.2	7,700	2.8	7	1,505	2.1	10,350	1.2
Fur, leather and other animal products.....	13	1,472	4.2	24,595	8.9	9	857	1.2	22,333	2.5
Textiles, clothing, etc.....	33	10,166	29.2	80,907	29.2	49	25,955	36.1	435,504	49.1
Pulp and paper.....	2	—	—	—	—	3	397	0.6	1,765	0.2
Printing and publishing.....	1	14	0.1	0	0.0	3	135	0.2	1,275	0.1
Miscellaneous wood products.....	12	1,102	3.2	3,238	1.2	20	4,871	6.8	41,664	4.7
Metal products.....	4	387	1.1	1,720	0.6	23	8,522	11.8	105,905	12.0
Non-metallic minerals, chemicals, etc.....	4	704	2.0	4,820	1.7	6	682	0.9	6,717	0.8
Miscellaneous products.....	2	—	—	—	—	4	334	0.5	3,134	0.4
Construction	10	655	2.0	1,301	0.5	25	1,286	1.8	7,376	0.8
Buildings and structures.....	5	170	0.5	402	0.2	9	330	0.5	2,087	0.2
Railway.....	2	—	—	—	—	1	50	0.1	125	0.0
Shipbuilding.....	2	—	—	—	—	2	—	—	—	—
Bridge ¹	2	—	—	—	—	1	62	0.1	310	0.1
Highway.....	3	218	0.6	500	0.2	13	831	1.1	4,769	0.5
Canal, harbour, waterway.....	2	—	—	—	—	2	—	—	—	—
Miscellaneous.....	2	297	0.9	399	0.1	1	13	0.0	85	0.0
Transportation and Public Utilities	15	3,291	9.4	12,052	4.3	16	1,441	2.0	14,458	1.6
Steam railways.....	2	—	—	—	—	2	—	—	—	—
Electric railways.....	2	—	—	—	—	1	21	0.0	126	0.0
Water transportation.....	9	1,085	3.1	5,095	1.8	13	1,409	2.0	14,299	1.6
Local transportation.....	4	2,149	6.2	6,435	2.3	2	11	0.0	33	0.0
Telegraphy and telephones.....	2	—	—	—	—	2	—	—	—	—
Electricity and gas.....	2	—	—	—	—	2	—	—	—	—
Miscellaneous.....	2	57	0.1	522	0.2	2	—	—	—	—
Trade	1	17	0.1	50	0.0	7	188	0.3	4,156	0.5
Finance	2	—	—	—	—	2	—	—	—	—
Service	17	558	1.6	4,907	1.8	26	1,221	1.7	5,314	0.6
Public administration ¹	2	—	—	—	—	1	12	0.0	75	0.0
Recreational.....	2	—	—	—	—	9	928	1.3	3,494	0.4
Custom and repair.....	3	244	0.7	1,340	0.5	3	53	0.1	310	0.0
Business and personal.....	14	314	0.9	3,567	1.3	13	228	0.3	1,435	0.2
Miscellaneous	2	—	—	—	—	2	—	—	—	—
Totals	156	34,812	100.0	276,997	100.0	278	71,905	100.0	886,393	100.0

¹ Non-ferrous smelting is included with "Mining"; erection of all large bridges is under "Bridge" Construction; water service is under "Public administration".

² None reported.

Causes and Results of Industrial Disputes.—In each of the previous years since the record was begun in 1901, the most important cause of disputes has been changes in wages, but in 1936 and in 1937 union questions led to a great number of disputes and involved very large numbers of workers. Nearly one-half of the strikes were caused by wage demands, and one-third by union demands—chiefly for recognition of union or against discharge of workers for union membership or activity. Strikes for union recognition were responsible for more than half of the time loss in

1937, involving one-third of the workers. As in 1936, about one-half of the disputes were terminated by direct negotiation between the parties and approximately one-quarter by the return of workers or their replacement.

In 1935, 1936, and 1937 there was a marked gain in the proportion of strikes settled by conciliation and arbitration, such proportion being roughly one-quarter as compared with about one-eighth in previous years.

Section 9.—Employment and Unemployment.

Subsection 1.—Operations of the Employment Service of Canada.

Employment Service of Canada.—Under Sec. 3 of the Employment Offices Co-ordination Act (c. 57, R.S.C., 1927), an Act passed by the Dominion Parliament in May, 1918, the Minister of Labour is empowered:—

"(a) to aid and encourage the organization and co-ordination of employment offices and to promote uniformity of methods among them;

"(b) to establish one or more clearing houses for the interchange of information between employment offices concerning the transfer of labour and other matters;

"(c) to compile and distribute information received from employment offices and from other sources regarding prevailing conditions of employment."

The Act further provides that certain sums of money are to be appropriated annually and paid to the provinces on a basis proportionate to the amount that each expends on the maintenance of employment offices.

The desired uniformity and co-ordination of employment-office activities throughout the various provinces are obtained by having the Dominion's payments contingent upon an agreement ensuring that the provinces, in the conduct of their employment offices, shall endeavour to fill situations in all trades and occupations for both men and women, and that no charge shall be made to employers or employees for this service. Each province agrees to maintain a provincial clearance system in co-operation with the interprovincial clearance system established by the Dominion Government, in order to secure the necessary mobility of labour as between localities in the same province or in different provinces. For the fiscal year 1937-38, agreements were concluded with all of the provinces except Prince Edward Island. Thus is formed the Employment Service of Canada—a chain of employment offices reaching from Halifax to Vancouver. At the time the Act came into force only 12 provincial employment offices were operated in Canada. This number was steadily increased until, at the close of 1919, due to the impetus given by the Employment Offices Co-ordination Act together with the requirements of the demobilization period, offices were functioning at 84 different centres. Subsequent contractions have reduced the Service to offices permanently located at 68 centres (on Dec. 31, 1937), distributed by provinces as follows: Nova Scotia, 3; New Brunswick, 4; Quebec, 11; Ontario, 28; Manitoba, 2; Saskatchewan, 7; Alberta, 5; and British Columbia, 8.

Employment Service Council of Canada.—An Order in Council, issued in 1918 in pursuance of the Act, provided for the formation of a body to be advisory to the Minister of Labour in the administration of the Act. This body, known as the Employment Service Council of Canada, is composed of representatives of the Dominion Departments of Labour and of Pensions and National Health, the Provincial Governments, the Canadian Manufacturers' Association, the Canadian Construction Association, the Trades and Labour Congress of Canada, the Railway Association of Canada, the Railway Brotherhoods, the Canadian Lumbermen's Association, the Canadian Council of Agriculture, and the returned soldiers. At the eleven meetings of the Council, the most recent of which was held on Aug. 21-22, 1930, various recommendations and suggestions relative to employment office administration were brought forward and presented to the Minister.

Operations of Employment Offices.—Statistics covering the work of the local offices are collected and tabulated by the Employment Service Branch of the Department of Labour. Table 19 shows the positions available, applications for work and placements effected by the Service in each year since 1920 for the Dominion, and for the years 1936 and 1937 by provinces. During 1937 there were 712,223 applications for employment, 418,388 vacancies and 389,536 placements recorded, as compared with 680,053 applications, 355,376 vacancies and 331,450 placements in 1936. About 29 p.c. of the total placements were of a casual nature, many of these being the result of work given on a rotation basis by municipalities and Provincial Governments on various relief schemes throughout the year to persons who, otherwise, would have been unemployed.

Reduced Railway Fares.—In order to facilitate the movement of labour in cases where there were not enough workers in any one locality to fill the available vacancies, the Employment Service, by special arrangement with nearly all the members of the Canadian Passenger Association, has been granted the privilege of issuing certificates which entitle the bearers to purchase railway tickets at the reduced rate of 2·5 cents per mile. This rate is for a second-class ticket and is applicable only to fares of not less than \$4. During 1937, 14,158 certificates were issued, 11,961 to persons proceeding to points within the same province as the dispatching office and 2,197 to workers going to points in other provinces. During 1936, 9,045 certificates for special rates were granted, 8,254 to persons travelling to employment within the same province as the dispatching office and 791 to persons for whom employment had been secured in other provinces.

19.—Applications for Employment, Positions Offered, and Placements Effected by the Employment Service of Canada, 1920-37, and by Provinces, 1936 and 1937.

NOTE.—Figures by provinces for the years 1920-25 will be found at p. 703 of the 1926 Year Book, for 1926-28 at p. 731 of the 1930 Year Book, for 1929-30 at p. 773 of the 1931 Year Book, for 1931-32 at p. 768 of the 1933 Year Book, for 1933 at p. 826 of the 1934-35 Year Book, and for 1934-35 at p. 767 of the 1936 Year Book.

Year and Province.	Applications Registered.		Vacancies Notified.		Placements Effected.	
	Men.	Women.	Men.	Women.	Men.	Women.
Totals, 1920.....	480,735	96,054	450,526	116,142	365,292	80,520
Totals, 1921.....	438,836	105,563	325,498	106,097	277,792	77,964
Totals, 1922.....	443,875	104,407	365,529	104,359	316,386	77,136
Totals, 1923.....	473,483	115,692	431,576	109,404	376,801	85,751
Totals, 1924.....	402,593	116,782	314,258	97,810	285,359	80,773
Totals, 1925.....	439,022	118,023	345,570	101,473	328,334	84,491
Totals, 1926.....	417,965	124,504	345,163	111,769	319,558	90,597
Totals, 1927.....	422,022	131,849	339,478	114,095	320,306	94,463
Totals, 1928.....	454,525	142,968	376,791	120,635	361,942	108,386
Totals, 1929.....	397,527	153,199	296,592	131,435	287,128	111,239
Totals, 1930.....	463,103	149,887	278,835	107,199	274,227	94,452
Totals, 1931.....	685,460	140,693	391,857	94,527	389,231	82,277
Totals, 1932.....	512,695	139,733	282,643	83,385	278,975	73,239
Totals, 1933.....	531,041	143,180	282,120	87,565	278,589	73,508
Totals, 1934.....	569,301	155,064	327,907	99,885	324,900	81,191
Totals, 1935.....	498,466	157,955	268,300	108,274	265,212	88,590
Totals, 1936.....	515,930	164,123	241,098	114,278	237,476	93,974
Totals, 1937.....	543,343	168,880	290,790	127,598	286,618	102,918
Nova Scotia.....1936	7,494	4,761	6,850	3,707	6,758	3,303
.....1937	9,581	5,687	9,248	4,916	9,149	4,428
New Brunswick.....1936	4,056	5,146	3,491	5,103	3,438	5,063
.....1937	4,963	5,636	4,386	5,601	4,344	5,589
Quebec.....1936	69,581	46,486	34,950	36,448	34,792	25,527
.....1937	104,349	45,867	45,268	43,670	45,826	28,513
Ontario.....1936	247,581	69,234	93,765	39,401	91,885	32,649
.....1937	239,539	68,836	115,290	43,000	110,090	36,379
Manitoba.....1936	46,572	10,389	24,291	8,203	24,569	7,942
.....1937	47,348	10,265	28,040	8,424	30,037	8,055
Saskatchewan.....1936	30,271	9,319	29,740	9,553	28,485	8,186
.....1937	23,660	10,079	21,160	8,954	20,204	7,751
Alberta.....1936	48,317	8,509	22,007	5,705	21,633	5,203
.....1937	47,703	9,409	22,422	5,486	22,073	4,727
British Columbia.....1936	62,058	10,279	26,004	6,158	25,916	6,101
.....1937	66,200	13,101	44,976	7,547	44,895	7,476

Subsection 2.—Unemployment as Reported by Trade Unions.

Monthly statistics on unemployment are compiled and published by the Employment Service Branch of the Dominion Department of Labour, based on returns received from 1,800 local trade unions having an aggregate membership of nearly 202,000 workers. "Unemployment" as here used means involuntary idleness, due to economic causes. Persons engaged in work other than their own trades, or idle because of illness, are not considered as unemployed, while unions involved in industrial disputes are excluded from the tabulations. As the number of unions making returns varies from month to month, with consequent variation in the membership upon which the percentages of unemployment are based, it should be understood that the figures for each month have reference only to the reporting organizations. Table 20 is a record of unemployment in trade unions, for the past 12 years, by provinces. The maximum of unemployment in 1937 was in January, when the percentage stood at 14.5; the 1937 low was 7.6 p.c. recorded in August. In 1936 the April figure of 15.1 p.c. constituted the maximum, and the minimum of 10.8 p.c. was reached in August. Employment among organized workers, as indicated by these statistics, was more active on the average in 1937 than in 1936, the average of the monthly figures of unemployment for 1937 being 10.7 p.c., while for 1936 the corresponding figure was 13.2 p.c.

20.—Percentages of Unemployment in Trade Unions, by Provinces, half-yearly, 1926-36, and by months, 1937.

NOTE.—For percentages of unemployment at June 30 and Dec. 31 from December, 1915, to December 1925, see p. 827 of the 1934-35 edition of the Year Book. For data by months from 1921, see successive issues of the Year Book commencing with the 1922-23 edition.

Month.	Year.	Nova Scotia and P.E.I.	New Brunswick.	Quebec.	Ontario.	Mani- toba.	Saskat- chewan.	Al- berta.	British Colum- bia.	Total.
June.....	1926	3.8	1.6	8.9	1.9	2.6	0.8	4.9	2.6	4.1
December.....	1926	3.2	2.2	7.6	5.6	4.3	2.1	6.7	7.5	5.9
June.....	1927	1.8	2.3	4.0	3.1	2.6	1.1	4.6	2.7	3.2
December.....	1927	4.3	1.5	9.3	5.1	5.4	5.6	3.7	10.5	6.6
June.....	1928	0.5	0.8	5.6	2.4	2.1	1.1	3.3	3.6	3.2
December.....	1928	3.9	0.9	10.7	4.0	8.1	4.4	6.9	6.9	6.6
June.....	1929	3.3	1.0	2.9	2.5	3.1	2.8	4.3	2.6	2.9
December.....	1929	5.2	2.4	14.5	9.7	12.8	13.0	13.9	11.5	11.4
June.....	1930	3.3	2.8	17.5	7.4	9.2	8.9	14.3	8.4	10.6
December.....	1930	7.5	8.7	22.8	17.3	14.2	15.9	13.8	16.8	17.0
June.....	1931	7.2	6.5	20.0	16.2	14.1	13.5	21.7	15.6	16.3
December.....	1931	13.8	9.6	29.0	20.3	16.5	19.5	16.9	21.2	21.1
June.....	1932	9.6	12.0	27.1	23.4	18.1	14.4	23.4	22.3	21.9
December.....	1932	8.4	16.5	30.9	28.5	20.9	20.8	22.8	26.0	25.5
June.....	1933	13.8	13.0	26.2	23.3	19.4	14.9	24.5	18.6	21.8
December.....	1933	11.2	11.5	23.2	24.9	20.3	17.2	17.6	19.8	21.0
June.....	1934	11.4	7.3	22.9	15.9	17.0	12.1	24.8	17.2	18.0
December.....	1934	4.7	7.2	24.5	18.7	16.1	13.1	9.0	24.6	18.0
June.....	1935	12.2	8.1	21.9	12.0	13.7	9.4	20.1	13.2	15.4
December.....	1935	7.8	7.5	20.6	13.4	13.1	11.6	9.6	15.9	14.6
June.....	1936	6.7	7.8	19.0	13.3	8.4	6.4	17.2	10.5	13.9
December.....	1936	6.8	6.2	20.9	13.8	10.9	12.8	6.4	12.7	14.3
January.....	1937	8.2	6.3	22.9	11.9	8.4	11.4	9.1	16.4	14.5
February.....	1937	7.9	5.0	21.3	11.4	9.4	11.5	9.5	14.1	13.7
March.....	1937	7.9	4.2	18.9	10.9	9.6	11.8	14.8	9.4	12.9
April.....	1937	8.2	5.5	15.6	8.6	8.6	10.0	16.9	7.4	11.1
May.....	1937	8.4	5.0	14.1	6.2	7.0	8.0	15.8	5.8	9.5
June.....	1937	5.9	4.7	15.3	7.6	5.7	7.2	16.6	8.0	10.4
July.....	1937	4.4	5.8	13.2	5.3	7.1	7.4	18.0	6.9	8.9
August.....	1937	5.9	5.5	11.1	4.3	6.5	7.2	12.5	6.2	7.6
September.....	1937	3.1	6.1	12.4	4.2	7.4	6.0	10.4	8.4	7.7
October.....	1937	2.8	5.0	13.0	6.7	9.6	6.6	7.4	12.3	8.9
November.....	1937	2.9	5.0	14.9	9.9	11.2	10.5	6.5	15.4	11.2
December.....	1937	3.3	4.6	16.5	12.9	16.8	10.6	6.7	15.8	13.0

Subsection 3.—Employment as Reported by Employers.

The Dominion Bureau of Statistics tabulates monthly reports of the numbers employed by firms having 15 or more persons on their staffs; the returns are representative of practically every industry except agriculture and the more specialized business and professional callings. During 1937, about 10,200 of these employers reported an average working force of 1,085,831 persons, varying from 975,862 at Mar. 1, to 1,197,647 at the beginning of October.

These employment statistics have been shown in a special study* which correlates the distribution of workers covered in 1931 with the distribution of workers enumerated at the 1931 census, to be representative, as far as several major industrial groupings are concerned, of the census classification.

The census of occupations showed 2,570,097 wage-earners in the Dominion, of whom 2,100,139 or 81.7 p.c. were at work on the census date (June 1, 1931). Obviously it is with those at work that the monthly employment figures for the same date must be compared. The 7,865 firms making returns for June 1, 1931, reported 940,875 employees, being 36.6 p.c. of the total number of persons reporting themselves as actual or potential wage-earners, and 44.8 p.c. of those at work in all industries at the census date. When the classes of workers not covered in the employment surveys are deducted from the census figures, there remains a total of 1,318,954 persons at work at the census date in the industries sampled in the monthly record, or a total of 1,369,351 if a due proportion of the unspecified workers is included. The employment survey for June 1, 1931, constituted 71.3 p.c. of this adjusted figure, *i.e.*, of the census total for the comparable industries without the unspecified workers, and 68.7 p.c. if a proportion of the unspecified workers is regarded as belonging in the census statistics adjusted industrially for this comparison. This sample may be considered quite adequate, but it would be rather larger if comparison could be made with a similar census taken at the present time, since the number of co-operating firms is constantly growing, having risen from 7,965 at June 1, 1931 to 10,178 at June 1, 1937, or 9,690 at June 1, 1936; the June 1 comparison is used so that the seasonal factor may not enter into the case. The increase in the co-operating employers is accompanied by a growth in the ratio of wage-earners sampled, though the latter increase is not in proportion to the gain in the number of reports tabulated, owing to the fact that the firms now being added to the numbering list tend to employ staffs below the average.

Representation in "Manufacturing" when correlated, is shown to be 82.8 p.c. of the workers enumerated at the census in the same industrial group; in mining it was 96.9 p.c.; in communications 80.4 p.c.; and in transportation 64.2 p.c. It follows that the figures of employment collected monthly may be used as a good index of the movement of the wage-earning population in intercensal years. (See also p. 741).

Employment as reported by leading employers in Canada was unusually active in 1937, reaching a level only surpassed by that of the boom year, 1929. The index, (based on the 1926 average as 100) averaged 114.1 in the twelve months; as compared with the 1936 mean of 103.7, this was an increase of 10 p.c., which was decidedly larger than the gain recorded between any other consecutive years, with the exception of that reported in 1934 over 1933. In the seventeen years of the record, the 1937 average index was only exceeded by that of 119.0 in 1929.

*See the report "Comparison of the Geographical and the Industrial Distribution of the Workers included in the Monthly Employment Surveys, with the Geographical and Industrial Distribution of the Workers enumerated at the Census of 1931", by M. E. K. Roughsedge, obtainable from the Dominion statistician, Ottawa.

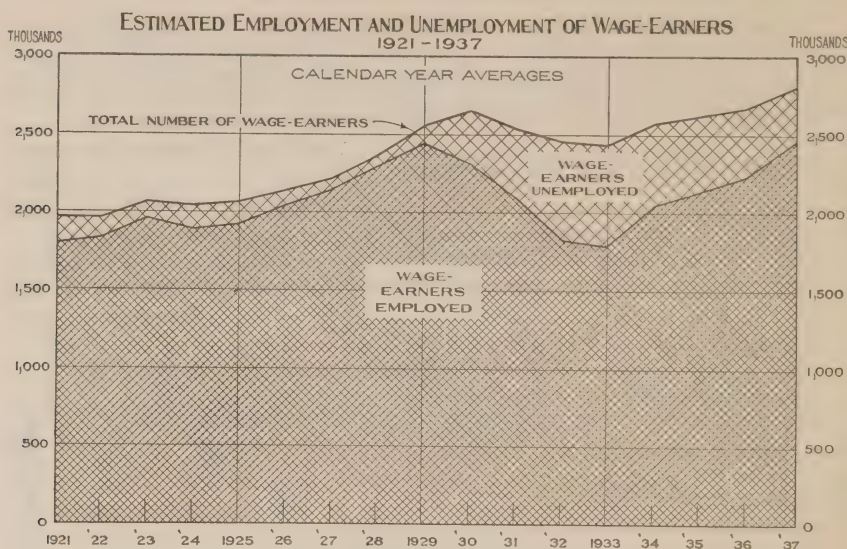
The fluctuations in general industrial employment in the past 12 years are illustrated in the following chart. This shows, to September, 1937, the generally upward movement that has characterized industrial activity since the low point of employment in the depression was reached at April, 1933.



The generally high level of industrial activity in 1937 was accompanied by a diminution in unemployment, though this was not commensurate with the advance in employment. The Census Analysis Branch of the Dominion Bureau of Statistics in a comprehensive study* of the known facts regarding employment, unemployment, and population in Canada, has evolved very significant estimates of the total number of wage-earners, of those in employment and those unemployed; the estimates cover workers in all industries, including agriculture and other important classes necessarily excluded from the monthly employment surveys. During 1937, the average number of wage-earners was estimated at 2,802,000, of whom 2,452,000 were employed and 349,000 were unemployed. In 1936, the estimated number of wage-earners was 2,671,000, of whom 2,225,000 were employed and 447,000 were unemployed. Based on these estimates, the unemployed in 1937 constituted some 12.5 p.c. of the total wage-earners, as compared with 16.7 p.c. in 1936. In 1928, when unemployment was at the minimum in the years since 1921, this proportion had been estimated at 2.5 p.c., and in 1929, at 4.2 p.c. The low point of the depression was reached in 1933, when it was estimated that, on the average, there were 265 unemployed men and women in each thousand wage-earners.

In the chart on p. 770 are depicted the fluctuations since 1921 in the estimated number of wage-earners, of those in employment and those unemployed, showing that in 1937 the potential and actual wage-earners reached their maxima while the estimated number of unemployed, though still abnormally large, was smaller than in any other year since 1930.

*See monograph "Unemployment" by M. C. McLean, M.A., which may be obtained from the Dominion Statistician.



Employment by Economic Areas.—The employment reported by leading industrial establishments was in considerably greater volume in 1937 than in 1936 in the Maritime Provinces, Quebec, Ontario, and British Columbia, but in the Prairie Provinces the situation was generally unchanged. In the Maritime Provinces and Quebec, industrial activity was higher than in any other year of the record, while in Ontario the 1929 index only was higher than that for 1937. In each of the economic areas, general improvement was noted in manufacturing, logging, mining, services, and trade, although the rate of increase varied in the different divisions of the country. A higher level of employment was indicated in transportation, except in the Prairies, where there was a slight decline, due to the crop failures in many sections. Construction in the western areas was also slacker than in 1936.

21.—Index Numbers of Employment as Reported by Employers in Economic Areas, as at the First of each Month, January, 1936, to December, 1937, with Yearly Averages since 1921.

NOTE.—These indexes are calculated upon the average for the calendar year 1926 as 100. The relative weight shows the proportion of employees reported in the indicated economic area to the total reported by all employers making returns in Canada at Dec. 1, 1937.

Year.	Maritime Provinces.	Quebec.	Ontario.	Prairie Provinces.	British Columbia.	Canada.
Averages, 1921.....	102.4	82.2	90.6	94.0	81.1	88.8
Averages, 1922.....	97.3	81.4	92.8	92.6	82.8	89.0
Averages, 1923.....	105.7	90.7	99.5	94.8	87.4	95.8
Averages, 1924.....	96.6	91.3	95.5	92.1	89.4	93.4
Averages, 1925.....	97.0	91.7	95.8	92.0	93.7	93.6
Averages, 1926.....	99.4	99.4	99.6	99.5	100.2	99.6
Averages, 1927.....	103.7	104.0	105.6	105.3	101.1	104.6
Averages, 1928.....	106.6	103.3	113.8	117.9	106.4	111.6
Averages, 1929.....	114.8	113.4	123.1	126.3	111.5	119.0
Averages, 1930.....	118.3	110.3	114.6	117.1	107.9	113.4
Averages, 1931.....	108.1	100.9	101.2	111.5	95.5	102.5
Averages, 1932.....	92.2	85.5	88.7	90.0	80.5	87.5
Averages, 1933.....	85.3	82.0	84.2	86.2	78.0	83.4
Averages, 1934.....	101.0	91.7	101.3	90.0	90.4	96.0
Averages, 1935.....	103.7	95.4	103.3	95.2	97.7	99.4

For footnote, see end of table on p. 771.

21.—Index Numbers of Employment as Reported by Employers in Economic Areas, as at the First of each Month, January, 1936, to December, 1937, with Yearly Averages since 1921—concluded.

Year and Month.	Maritime Provinces.	Quebec.	Ontario.	Prairie Provinces.	British Columbia.	Canada.
1936.						
January 1.....	108.1	95.5	102.7	95.1	92.4	99.1
February 1.....	102.2	95.2	102.4	93.7	94.1	98.4
March 1.....	101.7	95.1	103.8	95.1	92.4	98.9
April 1.....	101.8	91.4	103.4	90.5	95.9	97.4
May 1.....	103.4	96.4	103.4	92.7	99.0	99.5
June 1.....	103.4	99.8	104.7	97.7	102.2	102.0
July 1.....	111.7	101.6	106.2	101.9	104.8	104.6
August 1.....	113.9	101.3	107.1	103.9	107.9	105.6
September 1.....	114.4	103.0	108.1	107.4	109.3	107.1
October 1.....	117.9	106.0	112.6	108.6	108.1	110.1
November 1.....	119.4	110.3	112.8	106.0	105.4	111.0
December 1.....	115.3	112.6	112.9	98.6	101.5	110.1
Averages, 1936.....	109.4	100.7	106.7	99.3	101.1	103.7
1937.						
January 1.....	109.5	104.0	107.5	94.2	95.4	103.8
February 1.....	107.5	106.7	108.4	91.4	91.3	104.1
March 1.....	106.6	102.5	108.9	91.3	89.2	102.8
April 1.....	105.4	102.2	108.8	89.4	97.5	103.0
May 1.....	110.7	105.2	111.2	93.2	103.4	106.3
June 1.....	122.0	113.6	118.8	99.3	112.2	114.3
July 1.....	135.8	118.0	122.2	104.0	117.1	119.1
August 1.....	134.3	120.8	122.2	105.6	116.9	120.0
September 1.....	135.4	124.5	125.0	109.4	121.2	123.2
October 1.....	134.9	127.3	130.4	107.6	117.9	125.7
November 1.....	127.3	130.5	130.4	106.2	111.5	125.2
December 1.....	122.5	129.6	125.8	100.5	107.5	121.6
Averages, 1937.....	121.0	115.4	118.3	99.3	106.8	114.1
Relative weights of employ- ment in economic areas, as at Dec. 1, 1937 ²	7.6	31.1	42.3	11.1	7.9	100.0

¹Since the average for the calendar year 1926, including figures up to Dec. 31, 1926, is the base used in computing these indexes, the average index here given for the 12 months Jan. 1-Dec. 1, 1926, generally shows a slight variation from 100.

²Percentages of Dominion total.

Employment by Cities.—Improvement was reported in each of the eight centres for which statistics are segregated, firms in Montreal, Quebec city, Toronto, Ottawa, Hamilton, Windsor, Winnipeg, and Vancouver affording more employment than in 1936. The greatest gains, proportionately, were in Hamilton and Windsor, where marked activity in the iron and steel industries brought employment to an unusually high level, only exceeded in the former by that of 1928 and 1929, and in the latter by that of 1929. The indexes in these two centres were higher than in any other of the eight, while the lowest indexes were in Winnipeg, Quebec city, and Montreal.

Despite the generally upward movement indicated in the year under review, industrial activity in the leading cities, taken as a unit, continued to lag behind that in the Dominion as a whole, their 1937 indexes averaging 105.8, as compared with the Canada index of 114.1. In the four years of general industrial revival from the low point of the depression, indeed, the improvement in these cities has not kept pace with that in the Dominion as a whole.

Employment in manufacturing, communications, trade, and construction in the larger cities generally, does not yet appear to have reached a level equal to that in other parts of Canada. The most outstanding difference in this comparison is, of course, in construction, in which the index for the cities averaged 62.7 during 1937,

compared with the Canada figure of 99.5; in the building division, the indexes were 50.9 and 60.1, respectively. On the other hand, transportation in the cities appears relatively more active, their index at 91.9, being 7.8 p.c. higher than the figure for the Dominion as a whole. In the service division, the level of employment in the larger cities was similar to that elsewhere recorded.

22.—Index Numbers of Employment as Reported by Employers in Leading Cities, as at the First of each Month, January, 1936, to December, 1937, with Yearly Averages since 1922.

NOTE.—These indexes are calculated upon the average for the calendar year 1926 as 100. The relative weight shows the proportion of employees reported in the indicated city to the total reported by all employers making returns in Canada at Dec. 1, 1937.

Year and Month.	Montreal.	Quebec.	Toronto.	Ottawa.	Hamilton.	Windsor.	Winnipeg.	Vancouver.
Averages, 1922....	86.0	1	96.1	1	1	1	93.9	81.5
Averages, 1923....	92.7	1	98.0	107.2	94.6	1	90.6	82.5
Averages, 1924....	93.0	99.6	94.3	102.3	86.0	1	86.5	86.2
Averages, 1925....	94.2	97.9	95.7	100.1	88.0	85.1	88.5	92.6
Averages, 1926 ¹	99.7	99.1	99.6	100.0	99.3	99.9	99.2	99.9
Averages, 1927....	103.0	111.3	105.7	107.7	103.1	86.2	104.1	100.7
Averages, 1928....	105.2	119.9	112.1	115.8	108.2	137.3	110.1	104.3
Averages, 1929....	115.3	124.2	121.3	120.7	128.4	153.2	112.3	109.2
Averages, 1930....	111.8	125.3	116.3	123.1	113.9	128.6	107.6	109.8
Averages, 1931....	102.5	122.2	107.7	119.5	101.3	88.3	97.1	104.5
Averages, 1932....	88.1	101.8	95.2	99.3	83.7	78.4	86.6	88.5
Averages, 1933....	81.0	95.1	87.5	90.2	74.6	75.9	80.2	83.0
Averages, 1934....	84.5	95.1	93.5	99.5	84.1	93.1	82.9	87.4
Averages, 1935....	87.3	96.9	97.5	102.2	92.6	115.0	87.8	96.6
1936.								
January 1.....	86.4	93.5	100.6	103.2	95.7	116.4	91.9	97.2
February 1.....	87.6	92.0	96.4	99.5	96.8	120.0	91.2	97.8
March 1.....	87.5	93.3	97.8	101.4	97.1	117.7	94.1	96.9
April 1.....	88.3	91.7	98.7	103.1	96.8	131.2	88.1	100.1
May 1.....	92.7	95.8	100.2	107.7	98.1	136.1	87.3	101.9
June 1.....	93.7	96.8	101.1	108.2	97.6	123.2	90.9	103.8
July 1.....	93.5	94.5	101.4	110.0	99.4	113.0	92.7	106.0
August 1.....	92.2	96.5	101.3	107.4	99.8	115.1	93.8	109.2
September 1.....	94.3	97.9	103.4	111.2	97.7	106.9	92.9	110.0
October 1.....	95.6	98.1	105.5	110.9	98.0	120.3	95.3	109.1
November 1.....	94.6	97.1	105.9	108.8	100.4	126.1	94.9	107.0
December 1.....	98.3	95.2	105.7	104.3	101.7	129.4	94.7	106.0
Averages, 1936....	92.1	95.2	101.5	106.3	98.3	121.3	92.3	103.7
1937.								
January 1.....	90.4	92.0	103.4	102.8	99.0	137.1	92.4	105.3
February 1.....	91.8	91.7	101.9	98.8	101.7	145.2	89.4	104.7
March 1.....	92.6	92.7	103.2	99.8	103.7	146.8	90.8	103.8
April 1.....	96.8	93.3	105.8	101.9	108.2	151.4	91.6	104.4
May 1.....	101.1	97.6	107.4	106.6	111.9	152.9	93.5	105.6
June 1.....	105.2	101.6	108.7	111.8	114.2	153.1	96.5	110.8
July 1.....	105.5	106.4	109.5	114.9	116.3	149.8	99.2	114.8
August 1.....	105.2	108.6	107.8	112.7	117.7	135.0	97.6	117.3
September 1.....	107.6	110.0	110.0	113.7	119.4	132.2	98.8	119.6
October 1.....	107.4	107.2	112.6	114.4	117.3	146.2	97.6	117.9
November 1.....	106.4	103.8	112.7	111.7	119.4	154.1	98.0	115.0
December 1.....	104.3	99.3	111.9	105.2	116.2	153.1	95.4	109.5
Averages, 1937....	101.2	100.3	107.9	107.9	112.1	146.4	95.1	110.7
Relative weights, by cities, as at Dec. 1, 1937 ²	13.5	1.1	12.0	1.2	3.2	1.8	3.5	3.1

¹ Not available.

² Since the average for the calendar year 1926, including figures up to Dec. 31, 1926, is the base used in computing these indexes, the average index here shown for the 12 months Jan. 1-Dec. 1, 1926, generally shows a slight variation from 100.

³ Percentages of Dominion total.

Employment by Industries.—An analysis of the data furnished by employers shows that practically all industries shared in the improvement reported in 1937 over 1936, while in many cases, the situation was also more satisfactory than

in any other year since 1929. Manufacturing experienced during 1937 a lengthy period of uninterrupted expansion. All branches of factory employment contributed in greater or less degree to the recovery, which resulted in a higher level of industrial activity than in any other year since 1929.

Mining, particularly of metallic ores, advanced during many months of the year just passed, with the result that employment in the group as a whole was at its maximum for the seventeen years of this record. Logging showed exceptionally pronounced increases, and in that industry also, activity during 1937 reached the highest point yet recorded.

The volume of employment afforded in trade was greater than in any other year for which data are available, while in services (mainly hotels and restaurants, and laundries and dry-cleaning establishments), the 1937 annual index was only exceeded by that for 1929. Improvement in general business conditions in the Dominion, together with an excellent tourist season, resulted in the favourable situation in these industries during 1937. Communications provided employment for a greater number of persons than in any other year since 1932, but the index number in this industry was lower than in preceding years since 1921. Transportation showed little general change; although it was slightly more active than in the period 1932-36, it was quieter than in earlier years of the record.

Construction generally, was brisker than in 1936 or 1935, and also afforded more employment than in 1933 or 1932; nevertheless, employment in this industry continued at a relatively low level. Railway construction provided work for a larger number of workers than in the period, 1932-35, but was quieter than in 1936, when many men had been transferred from the unemployment relief camps to the construction departments of the railways. The building contractors furnishing data reported, on the whole, a rather better situation than in any other year since 1931. Work on the highways was also more active than in 1936, approximating the 1935 volume. In the past few years, the unemployment relief programs of the various governments have been an important factor in the employment afforded in the construction industries.

23.—Index Numbers of Employment as Reported by Employers, by Industrial Groups, as at the First of each Month, January, 1936, to December, 1937, with Yearly Averages since 1921.

NOTE.—These indexes are calculated upon the average for the calendar year 1926 as 100. The relative weight shows the proportion of the employees reported in the indicated industry to the total reported by all employers making returns in Canada at Dec. 1, 1937.

Year.	Manu- factur- ing.	Log- ging.	Mining.	Com- muni- cations.	Trans- porta- tion.	Con- struc- tion and Main- tenance.	Ser- vices.	Trade.	All Indus- tries. ¹
Averages, 1921.....	87.7	103.0	98.0	90.2	94.1	71.1	83.6	92.7	88.8
Averages, 1922.....	88.3	85.1	99.5	86.4	97.8	76.7	81.9	90.8	89.0
Averages, 1923.....	96.6	114.2	106.2	87.6	100.3	80.9	87.9	92.1	95.8
Averages, 1924.....	92.4	116.7	105.3	93.7	99.1	80.3	93.8	92.5	93.4
Averages, 1925.....	93.0	105.4	99.8	95.5	96.6	84.9	95.4	95.1	93.6
Averages, 1926.....	99.6	99.5	99.7	99.6	99.7	99.2	99.5	99.2	99.6
Averages, 1927.....	103.4	109.3	107.0	103.8	102.5	109.0	106.2	107.4	104.6
Averages, 1928.....	110.1	114.5	114.4	108.2	105.9	118.8	118.1	116.1	111.6
Averages, 1929.....	117.1	125.8	120.1	120.6	109.7	120.7	130.3	126.2	119.0
Averages, 1930.....	109.0	108.0	117.8	119.8	104.6	129.8	131.6	127.7	113.4
Averages, 1931.....	95.3	60.1	107.7	104.7	95.8	131.4	124.7	123.6	102.5
Averages, 1932.....	84.4	42.6	99.2	93.5	84.7	86.0	113.6	116.1	87.5
Averages, 1933.....	80.9	66.5	97.5	83.9	79.0	74.6	106.7	112.1	83.4
Averages, 1934.....	90.2	124.7	110.8	79.1	80.3	109.3	115.1	117.9	96.0
Averages, 1935.....	97.1	126.9	123.3	79.8	81.2	97.8	118.2	122.1	99.4

For footnotes, see end of table, p. 774.

23.—Index Numbers of Employment as Reported by Employers, by Industrial Groups, as at the First of each Month, January, 1936, to December, 1937, with Yearly Averages since 1921—concluded.

Year and Month.	Manu- factur- ing.	Log- ging.	Mining.	Com- muni- cations.	Trans- porta- tion.	Con- struc- tion and Main- tenance.	Ser- vices.	Trade.	All Indus- tries. ¹
1936.									
January 1.....	96.8	183.4	129.9	79.3	77.9	74.8	118.0	135.9	99.1
February 1.....	98.5	173.1	129.4	77.2	78.2	74.4	116.4	121.6	98.4
March 1.....	99.5	147.0	129.1	77.7	78.9	78.2	117.5	123.1	98.9
April 1.....	101.1	102.6	128.2	77.7	78.5	71.8	118.5	121.0	97.4
May 1.....	102.7	88.6	127.4	78.4	82.8	79.4	120.4	123.3	99.5
June 1.....	103.4	94.1	132.1	80.0	85.4	87.0	123.0	127.1	102.0
July 1.....	104.7	93.4	134.1	82.4	87.1	97.4	131.7	127.3	104.6
August 1.....	104.9	85.0	137.9	84.1	88.7	102.9	135.8	126.3	105.6
September 1.....	105.9	82.7	140.2	86.0	89.4	109.0	137.5	126.3	107.1
October 1.....	109.0	141.7	147.9	84.6	88.3	103.9	127.4	129.6	110.1
November 1.....	107.7	206.9	151.8	83.1	87.1	99.6	124.9	132.0	111.0
December 1.....	107.0	265.7	150.3	81.7	86.5	80.1	122.4	136.0	110.1
Averages, 1936.....	103.4	138.7	136.5	81.0	84.1	88.2	124.5	127.5	103.7
1937.									
January 1.....	102.4	242.1	145.6	80.7	81.4	61.2	124.8	136.9	103.8
February 1.....	105.3	244.4	147.6	79.8	80.7	57.2	119.1	128.4	104.1
March 1.....	107.6	193.3	145.8	80.8	79.6	52.8	118.9	126.1	102.8
April 1.....	110.8	132.5	146.0	81.4	79.5	53.7	122.7	127.5	103.0
May 1.....	113.8	86.7	147.4	82.9	85.1	71.4	125.2	128.4	106.3
June 1.....	117.9	109.1	151.9	85.6	86.7	105.2	129.0	131.5	114.3
July 1.....	119.0	125.0	153.6	88.0	89.4	128.5	137.5	133.4	119.1
August 1.....	118.1	124.7	153.7	89.9	89.1	139.8	141.7	132.2	120.0
September 1.....	121.2	143.4	159.1	90.9	89.7	144.5	146.6	130.9	123.2
October 1.....	121.7	208.5	163.9	90.5	90.4	144.3	135.4	133.4	125.7
November 1.....	119.0	306.3	161.1	88.9	87.2	131.7	131.0	137.0	125.2
December 1.....	116.3	355.4	162.3	85.9	84.1	104.2	130.6	139.6	121.6
Averages, 1937.....	114.4	189.3	153.2	85.4	85.2	99.5	130.2	132.1	114.1
Relative weights, by indus- tries, as at Dec. 1, 1937 ² .	50.9	8.8	6.5	2.0	8.7	10.7	2.5	9.9	100.0

¹ Except agriculture (see p. 768).

² Since the average for the calendar year 1926, including figures up to Dec. 31, 1926, is the base used in computing these indexes, the average index here given for the 12 months Jan. 1-Dec. 1, 1926, generally shows a slight variation from 100.

³ Percentages of Dominion total.

Subsection 4.—Employment and Unemployment Statistics of the Census.

In the 1933 edition of the Year Book, pp. 775-780 were devoted to an examination of the preliminary figures of unemployment as reported at June 1, 1931, for that date and for the preceding twelve months. The final results of this inquiry are available in Vol. VI of the Census Publications, which may be obtained from the King's Printer, Ottawa, at a price of 75 cents for the paper-bound volume.

Tables 24 and 25, on p. 836 of the 1934-35 Year Book, summarize, by industries, the statistics of those actually unemployed at the date of the Census, and of time lost during the twelve months preceding that date.

Subsection 5.—Unemployment Relief.

The assistance rendered by the Dominion Government under the Unemployment Relief Act, 1930, the Unemployment and Farm Relief Act, 1931, the Relief Act, 1932, the Relief Act, 1933, the Relief Act, 1934, the Relief Act, 1935, and the Unemployment Relief and Assistance Act, 1936, is set out in previous issues of the Canada Year Book. The recapitulation appearing at the end of this statement shows the Dominion's disbursements under those statutes as at Dec. 31, 1937.

The Unemployment and Agricultural Assistance Act, 1937.—At the second session of the Eighteenth Parliament the Unemployment and Agricultural Assistance Act, 1937, which received Royal Assent on Apr. 10, 1937, was enacted. This statute, the administration of which was vested in the Minister of Labour, provided that the Governor in Council might authorize the execution of works and undertakings determined to be in the general interests of Canada. It was further provided by the statute that agreements might be entered into by the Governor in Council with any of the provinces respecting the alleviation of unemployment conditions and of agricultural distress therein, and for the granting of financial assistance to any province by way of loan, advance or guarantee for the purpose of assisting the province to pay its share of the expenditure for such purposes.

Grants-in-Aid.—Under the provisions of the Unemployment and Agricultural Assistance Act, 1937, the Dominion continued throughout the fiscal year 1937-38 to assist the provinces in discharging their responsibilities in connection with the granting of aid to necessitous persons by way of a monthly grant-in-aid. The amounts of the monthly grants-in-aid paid to each of the provinces for the months of April to December, 1937, inclusive, are set forth in the following statement:—

Province.	April, 1937, to June, 1937, inclusive.	July, 1937, to September, 1937, inclusive.	October, 1937, to December, 1937, inclusive.
	\$	\$	\$
Prince Edward Island.....	2,000 per month	1,300 per month	1,750 per month
Nova Scotia.....	30,000 "	20,000 "	17,500 "
Quebec.....	500,000 "	410,000 "	400,000 "
Ontario.....	600,000 "	480,000 "	465,000 "
Manitoba.....	175,000 "	175,000 "	165,000 "
Saskatchewan.....	230,000 "	230,000 "	230,000 "
Alberta.....	130,000 "	130,000 "	125,000 "
British Columbia.....	150,000 "	120,000 "	115,000 "
Totals.....	1,817,000 per month	1,566,300 per month	1,519,250 per month

As a result of representations made by the province of New Brunswick to the effect that the granting of material aid had been discontinued, and an enlarged works program substituted therefor, the monthly grant-in-aid to that province was replaced by Dominion contribution toward the cost of the province's relief works expenditures of an additional amount equal to that which would have been paid to the province by way of grant-in-aid had such been necessary.

Relief Works.—In addition to the payment of the aforementioned monthly grants-in-aid agreements with all the provinces were authorized under the provisions of the Unemployment and Agricultural Assistance Act, 1937, providing for Dominion contribution toward the cost of works consisting in the main of Trans-Canada Highway and provincial highway works, provincial works, and, in some provinces, municipal works. Dominion contribution to the province's works program was generally on a fifty-fifty basis.

Farm Placement.—The agreements entered into with the provinces of Prince Edward Island, New Brunswick, Quebec, Manitoba, Saskatchewan, Alberta and British Columbia, under the Unemployment Relief and Assistance Act, 1936, respecting the placement on farms of unemployed persons who would otherwise be in receipt of aid, necessarily expired on Mar. 31, 1937, together with the legislation under which they were executed. Under the provisions of the Unemployment and Agricultural Assistance Act, 1937, these agreements were, at the request of the provinces, extended to Apr. 30, 1937. Later in the year agreements effective from

Oct. 1, 1937, to Mar. 31, 1938, were entered into with the four western provinces providing for the continuance of the Farm Improvement and Employment Plan along the same lines as provided by the 1936 agreements, that is, payment of \$5 per month to the farmer, and payment to the individual placed on the farm at a rate equal at the end of the period to \$7.50 per month. Provision was also made for the purchase of suitable work clothing at a cost not in excess of \$3 for each individual placed, while the necessary cost of transportation of workers from the point of employment to the home of the employing farmer was also contributed to by the Dominion under the terms of the agreements. The basis of the Dominion's contribution to the provinces under the provisions of the Farm Improvement and Employment agreements was the same as under the 1936 agreements, namely, 50 p.c., the provinces bearing all necessary administration expenses. The largest number of placements during any one month under the 1936 agreements was effected during January, 1937, when 43,915 persons were placed.

Drought Relief.—As the serious drought conditions in the large agricultural areas of the Prairie Provinces prevalent during 1936 were still existent at Mar. 31, 1937, the date of the expiration of the agreements entered into under the Unemployment Relief and Assistance Act, 1936, for aid in these areas, provision was made for the extension of the agreements to Aug. 31, 1937. These agreements provided for Dominion contribution of 100 p.c. of the costs, exclusive of administration expenses, incurred by the three provinces in distributing food, fuel, clothing; and necessary shelter to all permanent residents of the defined areas in need of material aid, except those located in cities or towns within the areas. The latter were cared for by the provinces and municipalities with the assistance of the Dominion grants-in-aid. Provision was made in the agreements that the measure of aid granted pursuant to the arrangement should not exceed that given to similar needy in other rural sections of the provinces. Effective from Sept. 1, 1937, the administration of aid in the drought areas was, in conformity with the recommendations of the National Employment Commission, transferred to the Department of Agriculture in order that the different groups of relief recipients might be segregated, and that agricultural assistance might be distinguished as far as possible from unemployment aid.

Youth Training.—To help the situation caused by the volume of unemployment among young people which existed concurrently with an increasing measure of industrial recovery and with a growing demand for skilled workers, Parliament voted the sum of \$1,000,000 to the Department of Labour to be used during 1937-38 for training and development projects for "unemployed young people" between the ages of 18 and 30. This fund was established to provide for: (a) training projects of an occupational nature devised to increase the skill and employability of young people; (b) industrial learnership courses devised to provide theoretical training concurrent with employment; (c) work projects devised to conserve natural resources, as well as to train and recondition the young people participating; and (d) training projects of a physical nature to assist in the maintenance of health and morale. Agreements were entered into with the provinces covering training projects suitable to their individual conditions. Some of the projects undertaken were as follows: forestry work; training in hard rock and placer mining; industrial apprenticeship and learnership; practical and technical training in agriculture; women's courses in household work, handicraft and other specialized services; and various forms of urban occupational training. Provision was made in the execution of these projects for vocational guidance, recreation and instruction in physical education. It was hoped by these means to make available for the primary and secondary industries a more adequate supply of skilled workers, and also to give an opportunity of training

to those young people who, having been unemployed for some years, had lost the advantages of their education and had never had an opportunity to acquire industrial skill. The cost of these youth-training projects was shared by the Dominion and the provinces on an equal basis, the provinces bearing all expenses of administration.

Relief Settlement.—The Dominion continued to assist the provinces of Quebec, Manitoba, Saskatchewan and Alberta in placing selected families, who would otherwise be in receipt of material aid, on the land under the relief settlement plan outlined at p. 762 of the 1937 Canada Year Book. The number of settler families and individuals approved and settled under the various agreements entered into with the provinces respecting relief settlement since 1932 are set forth in Table 24.

24.—Number of Settler Families and Individuals Approved and Settled under the Relief Acts Agreements, to Dec. 31, 1937.

Province.	Settler Families.	Total Individuals.
Nova Scotia.....	343	2,154
Quebec.....	1,778	11,091
Ontario.....	606	2,990
Manitoba.....	1,162	5,664
Saskatchewan.....	939	4,604
Alberta.....	727	3,403
British Columbia.....	52	285
Totals.....	5,607	30,191

Table 25 sets forth the Dominion's disbursements to Dec. 31, 1937, for assistance provided under relief legislation since 1930.

The summary of loans to the western provinces and the C.P.R. outstanding as at the same date is: Manitoba, \$22,188,146; Saskatchewan, \$57,253,807 (inclusive of \$17,682,158 written down to non-active asset); Alberta, \$25,886,198; British Columbia, \$32,271,716; C.P.R., \$2,447,000; total \$140,046,867.

25.—Disbursements by the Dominion for Assistance Provided Under Relief Legislation, 1930-37.

Item.	1930 Act.	1931 Act.	1932 Act.	1933 Act.	1934 Act.	1935 Act.	1936 Act.	1937 Act to Dec. 31, 1937.	Total.
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Disbursements to Provinces—									
Prince Edward Island.....	95	129	25	99	147	287	291	13	1,086
Nova Scotia.....	834	1,070	580	1,261	574	1,295	1,110	198	6,922
New Brunswick.....	504	763	220	593	425	1,060	910	Nil	4,475
Quebec.....	3,292	5,437	4,253	8,297	6,346	7,503	10,791	3,549	49,468
Ontario.....	4,692	11,101	7,987	12,914	11,045	16,208	13,982	4,182	82,111
Manitoba.....	1,600	3,324	1,742	2,372	2,119	3,563	4,399	1,786	20,905
Saskatchewan.....	1,689	8,225	5,612	2,715	7,610	7,097	9,256	3,850	46,054
Alberta.....	1,281	3,038	1,300	1,572	1,468	1,781	2,610	1,410	14,460
British Columbia.....	1,376	3,940	3,228	3,448	2,301	2,283	3,497	1,396	21,469
Yukon and Northwest Territories.....	20	10	3	5	Nil	10	Nil	Nil	48
Disbursements through Dominion Government Departments.....	57	4,596	1,033	7,643	8,393	8,252	100	Nil	30,074
Other Disbursements—									
Board of Railway Commissioners.....	500	500	Nil	Nil	Nil	Nil	Nil	Nil	1,000
Canadian Pacific Railway.....	864	209	Nil	Nil	Nil	Nil	Nil	Nil	1,073
Canadian National Railways.....	882	Nil	Nil	Nil	Nil	Nil	Nil	Nil	882
Administration expenses.....	43	85	68	87	89	140	179	180	871
National Employment Commission.....	Nil	Nil	Nil	Nil	Nil	Nil	147	135	282
Miscellaneous.....	Nil	Nil	3	Nil	5	21	9	8	46
Totals.....	17,729	42,427	26,054	41,006	40,522	49,500	47,281	16,707	281,226

¹ Includes \$5,000,000 advanced to the province for relief in the drought area.

² Includes \$4,000,000 advanced to the province for relief in the drought area.

Subsection 6.—National Employment Commission.*

After the presentation of its final report to the Government on Jan. 26 the National Employment Commission was dissolved on Feb. 1, 1938. On July 31, 1937, the commission had presented an interim report covering its activities from June 1, 1936, to June 30, 1937, and containing a summary of the recommendations made up to the latter date. This interim report, of which approximately 7,000 copies were distributed, was subsequently made an appendix to the final report.

During the year 1937 the Commission continued its activities, including a national re-registration and classification of persons in receipt of unemployment aid and the promotion of the Dominion Government Home Improvement Plan. The former was improved and speeded up so that figures were available with a minimum of delay. Promotion of the Home Improvement Plan, including the establishment of local and provincial voluntary committees throughout Canada, produced very satisfactory results. Not only were direct loan totals of considerable size, but it is estimated that expenditures on home improvement stimulated by the Plan but not involving borrowing were much larger. It is probable that such improvement as has been evident in the building industry can be attributed, in appreciable measure, to the success of the Home Improvement Plan.

Starting with July, 1937, the Commission issued a monthly information bulletin (25,000 copies) which circulated widely throughout Canada. This publication was designed to cover various phases of the Commission's attack on relief and unemployment and to clarify obscure features of these problems. It also provided a medium for issuing the monthly statistical breakdown of relief figures and other pertinent data.

A report on phases of employment conditions in Canadian industry, based on 7,725 replies to a questionnaire circulated among employers with more than 15 employees each, was completed. A great deal of valuable statistical data on employment conditions has thus been made available in compact form and distributed.

The Farm Improvement and Employment Plan, which resulted in placing 46,961 single unemployed persons, of whom 38,606 were males and 8,355 females, on farms during the winter of 1936-37, was again put into operation by the Government in the winter of 1937-38 and over 40,000 persons were placed. Supplementary plans provided for 6,784 men in the winter of 1936-37 and for approximately 2,500 men in that of 1937-38.

The Commission co-operated with the Department of Labour in reviewing all provincial plans for youth training and reconditioning under the Dominion appropriation of \$1,000,000 for that purpose. Studies of women's employment problems were made by the Women's Employment Committee and certain suggestions based on them incorporated in the final report. The importance of the tourist industry as a factor in enlarging employment opportunities was fully realized by the Commission and prompted recommendations calculated to develop and stimulate this trade.

The final report crystallized the views of the Commission on 'long range' policies and dealt at some length with methods which might be utilized to avoid, or at least to mitigate, unemployment conditions similar to those through which Canada had been passing. Drawing attention to the fact that the Commission had so far functioned almost entirely in an advisory capacity, it expressed the view that such work was substantially completed. The translating of Commission

* See 1937 Year Book, pp. 1052-1053.

recommendations into practical effect required a different type of activity, administrative as distinct from advisory. It recommended that the National Employment Commission be succeeded by a small administrative committee to be entrusted with the practical implementation of National Employment Commission recommendations as approved by the Dominion Government.

Section 10.—Old Age Pensions and Pensions for Blind Persons.

The Old Age Pensions Act, 1927.—Legislation respecting Old Age Pensions (R.S.C., 1927, c. 156) was adopted by the Dominion Parliament in 1927. Under the provisions of this statute the Dominion Government reimbursed each province participating in the Dominion scheme to the extent of one-half of the provincial expenditure for old age pensions. An amendment passed at the 1931 session of Parliament (c. 42, Statutes of 1931) provided that the Dominion contribution to the provinces be increased from 50 p.c. to 75 p.c. of the provincial disbursements for old age pensions. The Dominion contribution of 75 p.c. of provincial disbursements was made effective from Nov. 1, 1931; the provinces have since been reimbursed on this basis.

Sec. 5 of the Act provides that before any agreement is made with a province the scheme for the administration of pensions proposed to be adopted by the province shall be approved by the Governor in Council, and that no change in such scheme shall be made without the consent of the Governor in Council.

The qualifications required of an applicant for pension are set forth in Sec. 8 of the Act which reads as follows:—

(1) Provision shall be made for the payment of a pension to every person who, at the date of the proposed commencement of the pension:—

- (a) is a British subject, or, being a widow, who is not a British subject, was such before her marriage;
- (b) has attained the age of seventy years;
- (c) has resided in Canada for the twenty years immediately preceding the date aforesaid;
- (d) has resided in the province in which the application for pension is made for the five years immediately preceding the said date;
- (e) is not an Indian as defined by the Indian Act;
- (f) is not in receipt of an income of as much as three hundred and sixty-five dollars (\$365) a year; and
- (g) has not made any voluntary assignment or transfer of property for the purpose of qualifying for a pension.

(2) The receipt of a pension shall not by itself constitute a disqualification from voting at any provincial or municipal election.

Sec. 9 provides that the maximum pension payable shall be \$240 yearly, subject to reduction by the amount of the income of the pensioner in excess of \$125 a year. The pension authority may accept a transfer of the pensioner's interest in a dwelling house in which he resides, in which case the value of the dwelling is not considered in calculating the amount of pension payable. Subject to certain conditions, the pension authority is entitled to recover out of the estate of any deceased pensioner the amount of pension payments with interest at 5 p.c. per annum, compounded annually.

Sec. 11 provides for the reduction of pension where a pensioner has resided for a portion of the 20 aforementioned years in a province with which no agreement has been made. Sec. 15 provides for the suspension of pension where a pensioner has transferred his residence to some place out of Canada. It is provided by Sec. 16 that a pension shall not be subject to alienation or transfer by the pensioner or to seizure in satisfaction of any claim against him.

The Governor in Council was empowered by Sec. 19 of the Act to make regulations pursuant to this section. Existing regulations were revised and approved by Orders in Council dated Dec. 9, 1937, and Feb. 3, 1938.

The Dominion Old Age Pensions Act is now operative in all provinces and in the Northwest Territories.

The Gold Commissioner of Yukon was given authority, by a Yukon Territorial Council Ordinance passed in 1927, to enter into an agreement with the Dominion Government for the purpose of obtaining the benefits of the Old Age Pensions Act for residents in the Territory. No proposed scheme of administration for adoption in Yukon has been submitted for the approval of the Governor in Council.

Table 26 is a financial summary of old age pensions in Canada as at the end of the calendar year 1937.

26.—Financial Summary of Old Age Pensions in Canada, by Provinces, as at Dec. 31, 1937.

Item.	Prince Edward Island. — Act effective July 1, 1933.	Nova Scotia. — Act effective Mar. 1, 1934.	New Brunswick. — Act effective July 1, 1936.	Quebec. — Act effective Aug. 1, 1936.	Ontario. — Act effective Nov. 1, 1929.	Manitoba. — Act effective Sept. 1, 1928.
Total numbers of pensioners as at Dec. 31, 1937.....	1,811	13,914	11,022	45,752	57,508	11,859
Average monthly pensions. \$	10.53	14.64	13.60	17.79	18.39	18.68
Percentages of pensioners to total estimated population, 1937 ¹	1.97	2.59	2.53	1.48	1.56	1.67
Percentages of persons over 70 years of age to total population ¹	6.30	5.03	4.14	3.07	4.39	3.09
Dominion Government's contributions, Jan. 1 to Dec. 31, 1937..... \$	165,653	1,818,753	1,297,139	8,846,402 ²	9,405,691	1,985,967
Dominion Government's contributions from inception of Old Age Pensions Act to Dec. 31, 1937..... \$	637,181	6,349,730	1,856,411	8,846,402	56,484,750	12,202,596
Item.	Saskat- chewan. — Act effective May 1, 1928.	Alberta. — Act effective Aug. 1, 1929.	British Columbia. — Act effective Sept. 1, 1927.	Northwest Terra- tories. — Order in Council effective Jan. 25, 1929.	Total.	
Total numbers of pensioners as at Dec. 31, 1937.....	11,701	9,755	11,560	7	174,889	
Average monthly pensions..... \$	16.50	18.29	19.04	18.98	—	
Percentages of pensioners to total estimated population, 1937 ¹	1.26	1.26	1.54	0.07	—	
Percentages of persons over 70 years of age to total population ¹	2.36	2.33	3.60	1.00	—	
Dominion Government's contributions, Jan. 1 to Dec. 31, 1937..... \$	1,745,941	1,531,343	1,928,123	1,679	28,726,691	
Dominion Government's contributions from inception of Old Age Pensions Act to Dec. 31, 1937..... \$	10,998,298	7,655,262	11,416,151	12,543	116,459,324	

¹ Estimates of population on which these figures are based are given at p. 155.

² Includes payment for pensions granted Aug. 1 to Dec. 31, 1936. These contributions were made during 1937.

Pensions for Blind Persons.—By an amendment to the Old Age Pensions Act in 1937, provision was made for the payment of a pension to every blind person who, at the date of the proposed commencement of pension:—

- (a) is, and continues to be, so blind as to be unable to perform any work for which eyesight is essential;
- (b) has attained the age of forty years;
- (c) is not in receipt of a pension in respect of blindness under the Pension Act, or an allowance in respect of blindness under the War Veterans' Allowance Act;
- (d) is:—
 - (i) unmarried, or a widower without a child or children, or a widow without a child or children, and is not in receipt of an income of as much as four hundred and forty dollars a year, or—
 - (ii) married, or a widower with a child or children, or a widow with a child or children and is not in receipt of an income of as much as six hundred and forty dollars a year; and—
- (e) fulfils the conditions laid down in paragraphs (a), (c), (d), (e) and (g) of Subsection 1 of Section 8 of the Act.

The maximum pension payable to a blind person is \$240 yearly except in the case of a blind person, who, after the coming into force of the amendment to the Act, marries a person so blind as to be unable to perform any work for which eyesight is essential. The maximum pension in such a case is \$120 yearly.

The amended Act provides that pensions payable to blind persons shall be subject to reduction as follows:—

- (a) in the case of an unmarried person or a widower without a child or children or a widow without a child or children, by the amount of the income of the pensioner in excess of two hundred dollars a year;
- (b) in the case of a married person or a widower with a child or children or a widow with a child or children, by the amount of the income of the pensioner in excess of four hundred dollars a year;
- (c) in the case of a person married to a blind person receiving a pension under the amended Act, by the amount of the income of the pensioner in excess of two hundred dollars a year.

It is also provided that no blind person who is married, or is a widower with a child or children, or a widow with a child or children, shall be entitled to any pension in excess of the pension to which an unmarried person is entitled unless such married person and his or her spouse or such widower or widow and one or more of his or her children are living together.

The Governor in Council is empowered to make regulations with regard to pensions for blind persons and to define the expression "is so blind as to be unable to perform any work for which eyesight is essential".

27.—Financial Summary of Pensions for Blind Persons in Canada, by Provinces, as at Dec. 31, 1937.

Item.	Nova Scotia. — Act effective Oct. 1, 1937.	New Brunswick. — Act effective Sept. 1, 1937.	Quebec. — Act effective Oct. 1, 1937.	Ontario. — Act effective Sept. 1, 1937.	Manitoba. — Act effective Sept. 1, 1937.	Total.
Total numbers of pensioners.	20	18	201	315	13	567
Average monthly pensions. \$	19.71	19.40	19.51	19.66	18.56	—
Dominion Government's contributions from inception of amendment to Old Age Pensions Act. \$	626	718	8,321	6,294	360	16,319

Section 11.—The Co-operative Movement in Canada.

A general article on "The Co-operative Movement in Canada" appeared at pp. 704-720 of the 1925 edition of the Year Book under the three sub-headings of "Consumers' Co-operation", "Co-operative Credit", and "Producers' Co-operation".* Because of the pressure upon space, this article is not reprinted here, but

*The article referred to above was prepared for the Year Book by Miss Margaret Mackintosh, M.A., of the Department of Labour, Ottawa.

a digest of the latest available material on each of these three subdivisions of co-operation follows, the presentation of producers' co-operation being confined to that among agricultural producers.

The Co-operative Union of Canada was formed in 1909, with six affiliated societies and 1,595 members. In 1936, 59 societies reported to the Union, their membership being 152,633. The sales of the reporting societies totalled \$9,803,754 and the purchase dividends returned to their members amounted to \$208,239. The classes of co-operative activities covered included retailing, wholesale trading, marketing, dairying, transportation societies, and buying clubs.

Since October, 1909, the Union has published a monthly, *The Canadian Co-operator*, from which these statistics and those in Subsection 1 have been taken.*

Subsection 1.—Consumers' Co-operation.

The statistics in Table 28, which cover only those retail societies reporting to the Co-operative Union of Canada, cannot be considered as strictly comparable due to the fact that, should a large society fail to report in any one year (and this has frequently happened in the past), an apparent decrease in the activities of the societies, not in line with actual conditions, would result.

The following notes, covering membership only, will help the reader to judge the real trend of consumers' co-operative activity. The increase of 624 in 1932 was due, in part, to the failure of 2 existing societies to report in 1931, although 3 new societies reported a membership of 583. Of the total increase of 1,354, in 1933, 1,058 was due to the reporting, for the first time, of 4 societies which had been in existence from 2 to 5 years, while one new society reported 57 members. In 1934, the apparent increase of 418 is modified by the fact that it includes 210 members of a society not reported in 1933, while one new society, with 44 members, reported in 1934. In 1935 the situation was complicated, since 6 societies which reported in the previous year failed to do so in 1935, their 1934 membership having totalled 736—on the other hand, 2 previously-existing societies, which did not report in 1934, reported 177 members and 3 new societies reported 525 members; as these two factors almost balance, it would appear that the existing societies increased their membership by nearly 600. In 1936 three new societies reported a membership of 461, while those established societies which reported in both 1935 and 1936 showed an increase in membership of 1,022; in addition, six buying clubs in Quebec and Ontario reported a membership of 739.

*For details regarding the Co-operative Union of Canada and its activities, see the 1925 Year Book, pp. 708-709.

28.—Statistics of Retail Co-operative Societies Affiliated with the Co-operative Union of Canada, 1931-36.

Year.	Societies.	Members.	Share and Loan Capital.	Reserve Funds.	Stock in Trade.	Other Assets.	Sales.	Net Profits.	Purchase Divi- dends Paid.
	No.	No.	\$	\$	\$	\$	\$	\$	\$
1931....	23	8,122	574,450	449,467	455,986	955,347	2,874,746	185,116	147,175
1932....	27	8,746	536,245	436,184	443,424	829,866	2,631,515	117,895	111,130
1933....	31	10,100	504,623	360,784	443,489	638,138	2,719,212	106,434	80,220
1934....	33	10,518	515,369	370,388	479,574	728,404	3,353,884	117,722	91,784
1935....	34	11,116	573,957	372,732	503,004	877,634	3,876,195	161,113	130,518
1936....	41	13,696	637,012	365,925	585,240	891,053	4,445,339	209,379	163,952

Subsection 2.—Co-operative Credit in Quebec.

A form of co-operation which has achieved great success is that which provides short-term credit for small farmers and industrial workers in the province of Quebec. In 1900, what are known as "Les Caisses Populaires", or People's Banks, were begun with the establishment, by the late Alphonse Desjardins, of La Caisse Populaire at Lévis. M. Desjardins adopted the following principles: of lending money only for approved purposes to carefully selected members in a restricted area; of limited liability; of withdrawable shares of small amount payable by instalments; and of distribution of profits. These banks are for the most part established in agricultural districts. Loans are made to purchase agricultural implements at cash prices, to increase farm live stock, to improve farm buildings, to tide over a period of depression, to pay off a merchant, and for various similar purposes. The loans, though comprised within the term 'short credit', are for longer periods than are usual in ordinary commercial transactions because agricultural operations necessarily extend over longer periods than those of trade. They may be for 12, 15, or even 24 months, because they must give time for the farmer to realize on his products.

Details of organization may be found in the Statistical Year Book of Quebec, in the 1936 edition of which may be found statistics of the system as a whole. Complete information of the working of each individual bank, including such details as number of members and depositors, rates of interest paid, loans made and profits realized, classification of size of loans, receipts and expenses and a résumé of chief operations from 1917 to 1936, are published in the report entitled "Co-operative People's Banks and Co-operative Agricultural Societies".

Table 29 shows the progress of these banks by quinquennial years from 1915 to 1930 and annually since then.

29.—Progress of Co-operative People's Banks in Quebec, 1915, 1920, 1925 and 1930-36.

Year.	Banks Reporting.	Members.	Depositors.	Borrowers.	Loans Granted.	Value of Loans Granted.	Profits Realized.
	No.	No.	No.	No.	No.	\$	\$
1915.....	91	23,614	13,696	6,728	8,983	1,483,160	89,893
1920.....	113	31,752	26,238	9,213	15,390	4,341,544	311,323
1925.....	122	33,279	33,527	9,384	13,682	3,909,790	449,531
1930.....	179	45,767	44,940	14,278	18,857	3,724,537	645,096
1931.....	174	43,641	43,207	13,240	16,203	2,998,046	594,235
1932.....	168	40,933	40,201	12,363	13,283	2,157,886	531,765
1933.....	162	36,470	37,683	10,784	11,407	1,682,551	452,220
1934.....	190	38,811	39,723	11,230	11,295	2,141,762	441,876
1935 ¹	202	43,045	42,856	11,987	12,175	2,803,748	472,543
1936.....	234	49,890	49,796	13,453	13,974	3,370,821	459,601

All figures for 1935 have been revised since the publication of the 1937 Year Book.

Subsection 3.—Agricultural Co-operation in Canada in 1936.*

Farmers' co-operative business organizations occupy an important position in the marketing of Canadian agricultural products. The activities of the larger organizations such as the wheat pools, live stock, and fruit co-operatives have reached a high stage of development, and have received world-wide recognition. In addition to these, there are hundreds of comparatively small organizations working effectively to serve local areas.

Available statistics show 1024 co-operative associations actively engaged in business in 1936. The 1024 associations have 2,963 branches which, combined, make a total of 3,987 places of business engaged in the marketing of farm products and the purchase of supplies for farmers. The shareholders and members financially interested number 396,918 and patrons reported total 451,231. Combined assets total \$87,938,453 with plant and equipment valued at \$36,338,952. The members' equity amounts to \$51,252,828, consisting of paid-up share capital \$9,265,747 and reserves and surplus of \$41,987,081. Sales of farm products for the year under review amounted to \$157,031,405. The sales value of supplies handled totalled \$16,363,966 and other revenue \$531,746, which, combined, make a total business of \$173,927,117.

Available records indicate that the most important early activity of farmers in the field of co-operation in Canada was directed toward the marketing of farm products. In comparing the volume of business, marketing associations transact 12 times the business handled by purchasing agencies. Membership in the co-operative marketing associations is given as 357,798 persons compared with 38,167 members in purchasing organizations.

Within the marketing group the grain and seed co-operatives, which include the wheat pools of Western Canada, have the largest membership and investment, and exceed all other commodity groups in volume of business, which is estimated at \$110,826,433 for the year under review. A membership of 190,576 grain growers contributed to this business through 2,156 co-operative marketing agencies. Mainly through deductions from the selling price of their grain, these members have invested a sum of \$37,109,909 in their business and in addition have paid up \$3,467,754 in share capital. Combined assets total \$68,456,819.

One hundred and forty-six dairy co-operatives with 428 depots in Canada reported a membership of 49,796 with assets valued at \$5,077,441. Paid-up share capital amounted to \$1,962,202 with reserves of \$948,634. Sales of dairy products totalled \$16,328,900 for the year under review.

The records for 115 live-stock shipping and marketing associations showed a combined membership of 46,719. Financing of these associations is mainly by membership fees and commissions. Assets were comparatively low with value of plant and equipment amounting to \$560,053. This accommodated a business of \$15,713,236. The live-stock co-operatives undertake very little processing of their product. Their main activity is the assembling of live stock in cars at producing points for shipment to central markets.

*Statistics contained in this review are based on records received by the Economics Branch, Department of Agriculture, in 1937, covering the business year of 1936.

A large part of the fruit and vegetable crop is marketed through 129 co-operative agencies with a combined membership of 12,170 fruit growers. Assets for all companies total \$3,904,030; reserves and surplus amount to \$896,538. Sales of fruits and vegetables during the year amounted to \$8,192,975 which, together with supplies and other revenue, gave a total business of \$9,709,738.

Poultry producers have organized in each of the provinces to sell their products co-operatively. There were 57 associations with 280 places of business which reported a membership of 34,868. Assets amounted to \$533,193 with reserves of \$209,241. Sales for the year amounted to \$3,282,693.

Practically all the wool marketed co-operatively in Canada is handled by the Canadian Co-operative Wool Growers Limited. The company operates in each province through the medium of 18 sheep-breeders' and wool-growers' associations. The co-operative stores, grades and markets the wool received from its 8,000 patrons. In addition, it carries on advertising and educational work and handles materials and supplies for its members. The quantity of wool handled by the co-operative during the year amounted to 4,000,000 pounds.

In Ontario and Quebec, the honey producers are organized co-operatively with a combined membership of approximately 1,800. Two tobacco co-operatives in Ontario, and three in the province of Quebec report a total membership of 1,382 and sales of approximately \$500,000 for 1936. The *Producteurs de Sucre et Sirop d'Erable de Québec*, with a membership of 1,988, is organized on a co-operative basis. During the year under review the sales value of maple products marketed by this association amounted to \$456,048.

For years the Canadian National Silver Fox Breeders' Association has been engaged in the inspection of silver foxes for registration and the marketing of silver fox pelts in all the provinces of Canada. Sales of silver fox and other furs by this Company amounted to about \$1,500,000 in 1936. Operating within the province of Nova Scotia, the Nova Scotia Silver Fox Breeders' Association grades, warehouses, and markets fox pelts for its members in addition to carrying on valuable educational and field service work. Sales for the year under review amounted to approximately \$250,000.

Available statistics show 515 associations are organized for the purpose of purchasing farm supplies and merchandise on the co-operative plan. These consumer associations, of which nearly one-half are established in the province of Saskatchewan, have a combined membership of 38,167. The sales value of supplies handled during the year, by associations organized exclusively for the handling of supplies, amounted to \$12,304,994. In five of the provinces co-operative wholesale buying societies purchase goods for their member associations.

Within the miscellaneous group is included the Consumers' Refineries Co-operative Association Limited, Regina, Saskatchewan, which was incorporated in 1935 for the purpose of manufacturing petroleum products and selling them on a wholesale basis to local co-operative organizations throughout Saskatchewan. The co-operative completed its second year of operation successfully with sales amounting to approximately \$500,000.

For further information see Table 30, p. 786.

30.—Farmers' Co-operative Business Organizations¹ in Canada, 1936.²

Province or Function.	Places of Business.		Share-holders.		Patrons.		Total Assets.		Value of Plant.		General Liabilities.		Paid-up Share Capital.		Reserves and Surplus.		Sales of Farm Products.		Sales of Supplies.		Total Business, Including Other Revenue.	
	No.	No.	No.	No.	No.	No.	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
PROVINCIAL GROUPING.																						
Prince Edward Island.....	10	61	8,760	9,245	71,688	38,949	19,825	14,710	37,153	1,320,138	169,438	1,490,599										
Nova Scotia.....	54	86	5,997	10,172	1,680,763	602,877	967,756	407,074	305,933	1,319,542	1,343,958	2,683,761										
New Brunswick.....	23	69	3,966	9,780	406,157	126,156	287,375	93,310	25,490	832,410	405,671	1,241,303										
Quebec.....	346	783	38,859	38,859	4,940,070	2,202,535	2,896,549	796,124	1,247,397	9,501,821	3,062,760	12,693,528										
Ontario.....	151	179	29,432	40,224	3,389,592	1,298,134	1,503,550	146,975	739,067	14,645,850	3,005,416	17,718,146										
Manitoba.....	42	339	45,691	48,934	3,965,904	2,282,328	3,261,185	1,137,102	425,617	11,771,854	3,608,598	11,830,588										
Saskatchewan.....	280	1,384	152,757	138,594	39,717,441	16,016,598	12,840,627	2,179,435	25,739,379	61,570,777	3,392,046	85,069,752										
Alberta.....	47	547	63,216	68,515	19,958,651	6,016,876	9,514,293	3,362,146	10,082,212	26,763,471	969,073	27,791,698										
British Columbia.....	65	71	13,850	18,246	4,171,384	1,473,006	1,440,871	1,722,158	1,008,355	7,887,137	1,781,675	9,755,365										
Interprovincial.....	6	468	34,390	70,662	9,636,803	6,281,513	3,953,612	3,306,713	2,376,478	22,018,405	1,625,331	23,652,377										
Totals, Canada.....	1,024	3,957	396,918	451,231	87,938,453	36,338,932	36,655,625	9,265,747	41,987,051	157,031,405	16,363,966	173,927,117										
FUNCTIONAL AND COMMODITY GROUPING.																						
Marketing—																						
Dairy products.....	146	574	49,796	69,403	5,077,441	2,308,128	2,166,605	1,962,202	948,634	16,328,900	220,895	16,621,612										
Fruits and vegetables.....	98	129	12,170	15,157	3,904,030	1,807,693	2,115,528	891,984	896,538	8,192,975	1,412,846	9,709,738										
Grain and seed.....	35	2,156	190,576	190,389	68,456,819	29,006,591	27,879,156	3,467,754	37,109,909	109,354,860	1,464,938	110,826,433										
Live stock.....	115	198	46,719	73,006	1,171,255	560,053	361,946	629,854	179,455	15,370,509	296,501	15,713,236										
Poultry.....	57	280	34,868	18,220	533,193	115,117	252,445	71,507	209,241	3,282,693	43,011	3,342,930										
Honey.....	3	3	1,858	645	129,968	4,183	89,116	30,081	272,492	24,000	—	296,492										
Maple sugar.....	2	2	1,988	1,988	340,683	240,762	157,585	57,082	126,016	456,048	—	456,048										
Tobacco.....	5	5	1,382	1,127	407,765	122,901	41,302	76,702	289,761	539,658	—	542,061										
Wool.....	2	20	2,139	8,058	349,486	72,113	55,976	116,240	177,270	878,535	53,953	933,624										
Fur.....	2	2	2,890	5,000	50,111	5,422	9,068	—	41,043	1,822,644	21,129	1,848,474										
Miscellaneous.....	8	20	15,412	15,429	3,574,982	1,087,190	2,459,032	644,502	471,448	117,123	—	201,276										
Totals, Marketing.....	473	3,389	357,798	398,422	83,995,733	35,330,153	35,587,759	7,947,888	40,460,086	156,616,437	3,537,273	160,491,924										
Purchasing.....	515	562	38,167	51,859	3,749,432	903,193	1,017,234	1,229,658	1,502,540	414,968	12,304,994	12,897,782										
Miscellaneous.....	36	36	953	950	193,288	105,616	80,632	—	24,455	—	521,699	537,411										
Totals, All Groups ¹	1,024	3,957	396,918	451,231	87,938,453	36,338,932	36,655,625	9,265,747	41,987,051	157,031,405	16,363,966	173,927,117										

¹ Not including co-operative insurance companies, credit societies, telephone co-operatives and farmers' institutes.² Subject to revision.

Section 12.—Labour Legislation in Canada.

Owing to the division of legislative powers in Canada between the Dominion and the provinces under the British North America Act, labour legislation has been enacted by both the Dominion Parliament and the provincial legislatures, but most laws for the protection of workers are provincial.

Laws for the health and safety of persons employed in mines, factories, shops, and other places of business, other than transportation and communication services extending beyond the bounds of any province, and laws concerning trade unions, hours of work, wages, and workmen's compensation fall, in the main, under the head of "property and civil rights" or that of "local works and undertakings" and thus have been enacted by the provinces.

Dominion Legislation.—The Dominion Parliament has passed legislation relating to its own employees, to persons employed on Dominion public works and on works subsidized by the Dominion and to workmen employed in connection with railways and shipping. There are Dominion laws concerning trade unions, protecting trade union labels, for the prevention and settlement of industrial disputes and regulating picketing. The Lord's Day Act passed in 1906 prohibits Sunday labour except in works "of necessity and mercy". Regulations have been made to protect workers engaged in handling imported hides and skins from anthrax and there are laws prohibiting the importation and manufacture of matches made of white phosphorus and safeguarding persons handling explosives. The Alien Labour Act prohibits the bringing into Canada under contract of labour from any country placing a similar restriction on labour from Canada.

The Trade Unions Act permits the registration of trade unions with the Dominion Government. The agreements and trusts of registered unions, with certain exceptions, are enforceable and such unions may sue and be sued with respect to property in their own names.

Under the Criminal Code, trade unions are not liable to prosecution on the ground of conspiracy in restraint of trade and no prosecution may be maintained against any person for refusing to work with or for any employer or workman or for doing any act or causing any act to be done for the purpose of a trade combination unless such act is an offence punishable by statute. As regards picketing, it is declared an offence to beset or watch a house or place of business, if done wrongfully and without lawful authority, in order to compel any person to abstain from doing anything which he has a lawful right to do or to do anything from which he has a lawful right to abstain, but by an amendment of 1934 it is stipulated that "attending at or near or approaching to such house or other place as aforesaid, in order merely to obtain or communicate information, shall not be deemed a watching or besetting within the meaning of this section".

Any person is liable to a fine not exceeding \$5,000 or to two years' imprisonment or to both, who violates any law by paying a wage less than the legal minimum, by falsifying an employment record or by putting the wages of more than one employee in the same envelope in order to evade any law or who employs a child or minor in violation of any law.

Under the Fair Wages and Hours of Labour Act, 1935, persons employed on Dominion public works, either directly by the Government or by a contractor, or on work subsidized by the Government, must be paid fair and reasonable wages and their hours of work limited to eight a day and 44 a week, except when otherwise provided by the Governor in Council. Except in the case of work which is inter-

mittent or where it is impracticable to apply the rule, the hours of work of Dominion Government employees may not exceed eight a day with a half-holiday on Saturday.

As regards industrial disputes, there are two Dominion statutes, the Conciliation and Labour Act, a consolidation of two statutes of 1900 and 1903, and the Industrial Disputes Investigation Act of 1907. The former statute provided for the establishment of a Department of Labour, for the compilation and publication of information on labour matters and for the appointment of conciliators in industrial disputes.

The Industrial Disputes Investigation Act requires disputes in mines and public utilities, including railways and shipping, electric, gas, power, and water works, to be submitted to a tripartite board of conciliation and investigation, and reported on before a stoppage of work may be brought about by either employer or employed. With the consent of both parties to a dispute, a board may be established in any industry. The compulsory provisions of the Act apply to such of the above industries as are within Dominion jurisdiction and may be applied to those within provincial jurisdiction on enactment of a provincial law to that effect. Under such provincial statutes, the Act is in force in all the provinces but Prince Edward Island and British Columbia.

The Employment Offices Co-ordination Act enables grants to be made to the provinces to encourage the maintenance of free public employment offices and provides for clearing-houses to facilitate the transfer of labour from one province to another and for the publication of information.

Technical education was assisted by subsidies from the Dominion under the Technical Education Act of 1919, which appropriated \$10,000,000 for that purpose over a period of 10 years. The Vocational Education Act, 1931, was designed to continue this policy by providing \$750,000 annually for 15 years but the Act has not been put in operation.

The Railways Act provides for the safety of persons employed on railways within Dominion jurisdiction, requires wages to be paid at least semi-monthly and gives power to the Board of Railway Commissioners to limit hours of labour.

The Canada Shipping Act contains health and safety provisions and insures the payment of seamen's wages. It gives effect to six Conventions of the International Labour Conference; Conventions fixing a minimum age for employment at sea, establishing a minimum age for employment as trimmer or stoker, providing for unemployment indemnity in case of loss of the ship, requiring a medical examination of children and young persons employed at sea, regulating seamen's articles of agreement and requiring the marking of the weight on heavy packages. Provision is made for regulations to implement two other Conventions for the protection of dock workers and for the repatriation of seamen. Regulations have been made giving effect, in a large measure, to the Repatriation of Seamen Convention.

Provincial Legislation.—Early legislation in all the provinces but Prince Edward Island, Nova Scotia and New Brunswick provided for the recovery of wages and there were statutes in all the provinces regulating apprenticeship. Little change has been made in the former Acts enabling a justice of the peace to whom a complaint has been made concerning the non-payment of wages to summon the employer and direct payment of wages found due. Apprenticeship Acts more in line with modern conditions and based on the co-operation of employers in the training of apprentices under provincial regulation and with provincial inspection were enacted in Ontario in 1928, in British Columbia in 1935, and in Nova Scotia in 1937. In the first instance they applied only to certain building trades but pro-

vision was made for their extension to other industries. At the present time the Ontario Act applies also to the repair of motor vehicles and the British Columbia Act to automobile maintenance, sign painting, ship and boat building and repairs, electrical repair work, jewellery manufacture and repairs, and the construction and repair of aircraft.

Conciliation.—Laws for conciliation in labour disputes which were passed about the turn of the century have been repealed in Ontario, Nova Scotia and British Columbia, while in Quebec the Trade Disputes Act enacted in 1901 is still in operation. Quebec has also a statute of 1921 providing for compulsory arbitration in disputes between certain classes of municipal employees and their employers where 25 or more workpeople are employed. The Ontario Municipal Board Act of 1906 enables mediation and arbitration in disputes in connection with railways or public utilities under its jurisdiction.

In Manitoba, the Strikes and Lockouts Prevention Act, 1937, and in British Columbia, the Industrial Conciliation and Arbitration Act, 1937, make provision for conciliation and for investigation and report by a board if conciliation fails. A somewhat similar statute has been enacted in Alberta in 1938. It repeals the Labour Disputes Act of 1926, providing for the appointment of boards of conciliation and investigation. The Manitoba, British Columbia and Alberta statutes prohibit strikes and lockouts after application has been made for the appointment of a board of conciliation and investigation in Manitoba, or of a conciliation commissioner in Alberta and British Columbia, and until a final report has been made in each province. In the methods of procedure laid down in these three statutes they are largely similar to the Dominion Industrial Disputes Investigation Act.

The New Brunswick Fair Wage Act, 1936, repealed in 1938, provided for a Fair Wage Officer to hear complaints, make inquiries, and effect adjustment of differences and for a Fair Wage Board to inquire into labour conditions and establish fair rates of wages and the maximum hours to which such rates should apply. The Labour and Industrial Relations Act, 1938, provides for a Fair Wage Officer with the same duties, and, like the three western provinces, for conciliation and investigation in disputes before a stoppage of work.

In each of the provinces except British Columbia and Prince Edward Island there is a statute declaring the Dominion Industrial Disputes Investigation Act applicable to disputes within its scope which are within provincial jurisdiction.

Trade Unions.—Until 1937, only British Columbia and Quebec had statutes relating expressly to trade unions. The British Columbia Trade Union Act of 1902 declared a trade union not liable for any wrongful act in connection with a strike or lockout unless through its officers it had authorized or concurred in the act. Persuasion without intimidation or the publication or communication of information concerning a dispute may not be enjoined or made a cause for damages.

The Quebec Professional Syndicates Act of 1924 enables the incorporation of trade unions of 20 or more persons, of whom two-thirds are British subjects, with the right to hold property, establish benefit funds and enter into enforceable agreements with other unions and with employers.

The Nova Scotia Trade Union Act, 1937, the Alberta and British Columbia Conciliation and Arbitration Acts, and the Saskatchewan Freedom of Trade Union Association Act, 1938, declare it lawful for employees to form a trade union and to bargain collectively through the union officers or, in Alberta and British Columbia, through representatives duly elected by a majority vote of the employees affected.

Penalties are provided for any employer who, by intimidation or threat of dismissal or by actual dismissal, prevents or tries to prevent any employee from joining an association of employees. In Nova Scotia, in Alberta (as the Act of the latter province was amended and re-enacted in the Industrial Conciliation and Arbitration Act, 1938) and in Saskatchewan (by the Act of 1938) every trade union is required to file its constitution and by-laws with the Government. In New Brunswick, this may be required and also financial returns. In Alberta and Saskatchewan, financial statements must be furnished if requested. In Nova Scotia, annual financial returns are required.

The Manitoba Strikes and Lockouts Prevention Act, 1937, declares any person liable to a fine who seeks, by intimidation or threat, to compel any person to join or refrain from joining a trade union.

The Quebec Workmen's Wages Act, 1937, rendered liable to a penalty of fine or imprisonment any employer who tried to prevent an employee by threats of dismissal or other threats from becoming a member of an association. Slightly different provision was made by the Fair Wage Act, 1937. Both statutes were changed in 1938 to apply the clause to any person instead of any employer.

The New Brunswick Act of 1938 declares the right of employees to organize and to bargain collectively through representatives elected by a majority vote. It provides a penalty for any person who by threat of dismissal or actual dismissal seeks to compel any person to join or refrain from joining any organization or to work or abstain from working.

Collective Agreements.—In Quebec, as stated above, collective agreements between "professional syndicates" and employers are legally enforceable under an Act of 1924. The Collective Labour Agreements Extension Act, 1934, as amended, gives the Lieutenant-Governor in Council power to declare binding on all employers and employees engaged in an industry the wages and hours and apprenticeship terms of a collective agreement arrived at by employers and trade unions in the industry, provided that the agreement covers a sufficient proportion of the industry. The Act, as amended in 1938, applies also to agreements with "groups of employees".

Industrial Standards.—The Industrial Standards Act, 1935, of Ontario enables the Minister of Labour, on petition of representatives of employers and employed in any industry, to call a conference of employers and workers in the industry for the purpose of arriving at an agreement as to wages and hours. If there is agreement between a proper and sufficient representation of employers and employees, the Lieutenant-Governor in Council may, on the recommendation of the Minister, declare the minimum wages and maximum hours agreed upon to be binding on all employers and employed in the industry within the area designated. Similar statutes have been passed in Alberta, Nova Scotia (applying only to building trades in Halifax and Dartmouth) and in Saskatchewan.

Under these statutes, schedules, as they are called, of wages and hours have been made binding in the following industries: in Ontario, in certain building trades in 12 cities or towns, in men's clothing, women's coats and suits, millinery, wood furniture, and in soft furniture in Toronto and vicinity, in brewing and in logging in three districts, in baking in Ottawa, and in barber shops in 31 cities and towns; in Alberta, in two building trades in Edmonton and Calgary, in brewing, in baking in two districts, and for creosote workers in Calgary, and taxi drivers in Edmonton; in Nova Scotia, in four building trades in Halifax and Dartmouth; and in Saskatche-

wan, in one or two building trades in three cities, for barbers and hairdressers in three cities, and in shoe repairing in Regina.

Minimum Wages.—Minimum wage laws applying to female workers have been enacted in all provinces except Prince Edward Island. The New Brunswick Minimum Wage Act, 1930, has not been proclaimed. In Alberta and British Columbia, there are also Minimum Wage Acts for male employees and the Acts of the other provinces, except New Brunswick and Nova Scotia, have been revised or amended to cover male workers. The New Brunswick Fair Wage Act, 1936, is, in part, a conciliation measure and relates to both sexes. All the minimum wage laws provide for an administrative body to fix the minimum rates. Only in Manitoba does the statute itself make any stipulation as to the rate of wages. The Manitoba Act provides that, where a minimum has been fixed for any class of employees, no person over 18 years of age may be employed in the industry for less than 25 cents an hour unless a different rate is fixed by the Minimum Wage Board.

In Alberta, British Columbia, New Brunswick, Nova Scotia, Ontario, and Quebec the Acts apply to all industries except agriculture and domestic service and in Manitoba the Act may be extended to such industries by Order in Council. In Saskatchewan the law is restricted to factories, mail-order houses and retail stores, beauty parlours, barber shops, hotels, and restaurants. The geographical scope of the minimum wage laws has also been extended so that at the present time all the Acts apply, or may be applied, to all parts of the provinces. In Saskatchewan existing minimum wage orders, however, apply only to cities and within a 10-mile radius thereof.

Under the first Acts in the four western provinces the Boards could limit hours of labour. In Ontario, Quebec, and Nova Scotia the Boards had merely power to specify the hours to which the rates were to apply and to fix overtime rates. In Alberta the Hours of Work Act, 1936, relating to all industries but agriculture and domestic service, repealed the section of the Minimum Wage Act relating to hours. In British Columbia hours of work may still be restricted under the Female Minimum Wage Act and in Manitoba and Saskatchewan under the Acts applying to both sexes, but in Saskatchewan the orders now in force omit the clauses which formerly limited hours of work. Only in British Columbia and Manitoba, therefore, are hours limited by Minimum Wage Orders. In the former province only female workers are affected by such restriction, but in Manitoba maximum hours are fixed for both sexes by the Minimum Wage Board.

Orders have been made under all the minimum wage laws in force, but in New Brunswick the only orders issued have applied to particular plants where the Fair Wage Board inquired into conditions after complaints had been made. In Ontario and Quebec the orders issued by the former Minimum Wage Boards, applying to women, remain in force until replaced by orders made under the new Acts of 1937 relating to both sexes.

Under special statutes minimum wages are fixed for motor vehicle drivers and lumber workers in some provinces.

In Manitoba the Fair Wage Act, applying to provincial public works, was extended in 1934 to cover private construction of more than \$100 value in cities and towns of over 2,000 population.

Fair Wages.—New Brunswick, Manitoba and Ontario have statutes requiring the payment of "fair wages" to persons employed on provincial public works. In the

other provinces a similar policy is based on a resolution of the legislature or departmental regulations. Fair wages are defined as those current for competent workmen in the district or those determined as fair by the Minister. The Ontario Government Contracts Hours and Wages Act, 1937, like the Dominion statute, also provides for an 8-hour day and 44-hour week for public works employees.

Hours of Labour.—In addition to the limitation of hours of work effected under the Quebec Workmen's Wages Act, the Industrial Standards Acts, and the Minimum Wage Acts, as indicated above, there is statutory regulation in all provinces but Prince Edward Island.

In Alberta and British Columbia Hours of Work Acts apply to both sexes. In British Columbia the Act provides an 8-hour day and 48-hour week for persons employed in mines, factories, construction, retail and wholesale stores, road transport, barber shops, and bakeries, and in catering or as hotel clerks or elevator operators. The Alberta statute fixes a maximum of 9 hours a day and 54 hours a week for male workers and 8 hours a day and 48 hours a week for females in any trade or occupation except agriculture or domestic service. Both Acts permit temporary and permanent exceptions to be made by regulation.

In Quebec and Nova Scotia there are statutes authorizing regulations to limit hours of work. In the former province hours have thus been restricted throughout the province in the building trades, except on small jobs, to 8 a day and 48 a week for all but the skilled workers in the Montreal Division, for whom the weekly maximum is 44. Maximum hours of work have been fixed for beauty parlours and shoe-repair shops on the island of Montreal at 55 and 64, respectively. The Nova Scotia Act may be applied to mining, manufacturing and construction of any kind but no action has been taken to apply it.

The only other legislation in Canada to limit hours of work is contained in statutes applying to certain kinds of undertakings, such as mines, factories, and shops, or certain classes of workers such as motor vehicle operators.

Coal miners below ground have a maximum 8-hour day in Alberta, British Columbia, New Brunswick, and Nova Scotia and in Saskatchewan unless it is agreed otherwise. Work above ground in coal mines is also limited to 8 hours a day in Alberta and, unless employer and employee make a contrary agreement, in Saskatchewan. Metal miners below ground have a maximum 8-hour day in British Columbia, New Brunswick, northern Ontario and Yukon. In Alberta there is a statutory 9-hour day and 54-hour week both above and below ground in metal mines. In British Columbia workers above ground, as below, have an 8-hour day and in Yukon also, unless a special overtime rate is paid.

In factories, hours of women and young persons are restricted by the factory laws of Manitoba, New Brunswick, Ontario, Quebec, and Saskatchewan. Maximum hours fixed by these statutes are: 48 a week in Saskatchewan, 9 a day and 54 a week in Manitoba, 10 a day and 55 a week in Quebec, and 10 a day and 60 a week in New Brunswick and Ontario. A new Act in New Brunswick would limit weekly hours to 50 but it has not been proclaimed. In Manitoba the factory law has been superseded in respect to weekly hours by an order of the Minimum Wage Board which fixes a maximum of 48 for women and for boys under 18 in factories. In all provinces provision is made for longer hours in cases of emergency. There is no limitation of hours in Nova Scotia factories and in Prince Edward Island there is no factory law.

In shops, hours of all workers are limited in Alberta and British Columbia by the Hours of Work Acts. In Ontario maximum hours for women and for boys under 16 are 10 a day and 60 a week. In Quebec this weekly maximum applies to women and to boys under 18 in cities of 10,000 or over. Provision for overtime is made in these four provinces. In Manitoba a minimum wage order fixes for all shop employees a basic 48-hour week, 9-hour day and 10½-hour Saturday with special rates for overtime. Overtime may not be worked by any person under 18 and it is limited for females to 36 days in the year.

In hotels and restaurants, hours of work are restricted in Alberta and British Columbia by the Hours of Work Acts. In British Columbia the Act limits to 8 a day and 48 a week the hours of work of hotel clerks and of persons employed in hotels, restaurants, dance-halls, ice-cream parlours or other places, in the preparation or serving of food or refreshments for which a charge is made, or in work incidental thereto. A minimum wage order for female workers in the hotel and catering industry gives a maximum 8-hour day and 48-hour week to all women and girls employed in hotels, lodging-houses, cafes, dance-halls, hospitals (except nurses), clubs, dining-rooms and kitchens connected with industrial or commercial establishments or with schools or office buildings or any other place where lodging or meals are provided at a charge. An order of the Manitoba Minimum Wage Board limits the hours of all persons employed in restaurants and of boys under 18, and girls and women in hotels to 10 a day and 48 a week. In Ontario boys under 16 and women and girls may not be employed more than 10 hours a day or 60 a week in restaurants. In Quebec working hours are limited by regulation in towns of 3,000 or more to 12 a day in hotels, restaurants or clubs where 5 or more workers are employed. In all provinces provision is made for longer hours in emergencies and in some cases for certain workers.

There is statutory provision for a weekly rest day for workers in hotels and restaurants in the cities of Manitoba, Ontario, and Saskatchewan. In Quebec provision is made by Order in Council relating to such hotels, restaurants or clubs as are indicated in the preceding paragraph.

The hours of office workers are governed in Alberta by the Hours of Work Act and in Manitoba by a minimum wage order fixing maximum hours in Winnipeg at 8 a day and 44 a week.

For street railway employees the only statutory limitation of hours is in Ontario, where it is stipulated that no employee may work more than 6 days of 10 hours each. In road transport hours are limited in Alberta and British Columbia by the Hours of Work Acts. Special regulations provide for overtime in British Columbia, and in Alberta the maximum hours of drivers of motor buses in Edmonton are 12 a day on 6 days a week and of passenger vehicles in the province 9 hours a day or, when permitted on certain routes, 10 hours a day. In Manitoba, New Brunswick, Ontario, Prince Edward Island, and Saskatchewan hours of work of drivers of motor vehicles for commercial use are limited by statute or regulation. In Prince Edward Island and Ontario maximum hours that may be spent in driving are 10 in any 24-hour period; in New Brunswick 10 in 16 hours, except in emergencies; and in Manitoba regulations restrict the hours of driving passenger vehicles to 9 in 24 and the hours of work in any capacity to 12 in 24 and the number of days to 6 in a week. In Winnipeg maximum hours for taxi drivers are 12 on 6 days in the week.

Weekly Rest Day.—As noted above, a weekly rest day is provided by law for hotel and restaurant employees in cities in Quebec, Ontario, Manitoba, and Saskatchewan. In the two latter provinces this law has a wider application. In Saskatchewan it covers any trade, industry or occupation and in Manitoba the establishments specified include factories, works of construction, and the operation of street railways. In both provinces the Act applies to cities but may be extended by Order in Council to other parts.

The Alberta Hours of Work Act, 1936, stipulates that every employee in any industry except agriculture and domestic service shall have a weekly day of rest and in Nova Scotia the Limitation of Hours Act, 1935, relating to mining, manufacturing, construction and the furnishing of electric power, and water or gas, makes similar provision.

The Lord's Day Act of the Dominion Parliament was noted above. There is also a Sunday Observance Act in Quebec.

Child Labour.—A minimum age for employment is established by Acts applying to mines, factories, shops, and street trades. Child labour is forbidden in most of the provinces in mines and factories. In other kinds of establishments its prohibition is less general.

In all the provinces where mining is carried on, except Manitoba, the employment of children below ground is prohibited, but the age-limit varies. Above ground there is no prohibition in New Brunswick or Quebec or about coal mines in Saskatchewan. For work in coal mines below ground the legal minimum is 14 years in Saskatchewan, 15 in British Columbia, 16 in New Brunswick and Nova Scotia, and 17 in Alberta. In metal mines and in mining for non-metallic minerals other than coal no boy may be employed below ground under 12 years of age in the Yukon Territory, under 15 in Quebec, 16 in New Brunswick, Nova Scotia, and Saskatchewan or 18 in British Columbia and Ontario. Boys may not be employed above ground about coal mines at less than 14 years of age in British Columbia, 16 in Nova Scotia and 17 in Alberta. For work above ground the minimum age in mines other than coal mines is 12 in Yukon, 14 in Saskatchewan, 15 in British Columbia and 16 in Nova Scotia and Ontario.

Factory employment is prohibited by law to children under specified ages in all the provinces but New Brunswick and Prince Edward Island. In New Brunswick the Factories Act, 1937, would forbid such employment for those under 15 but the Act has not been proclaimed. The minimum age for workers in factories is 14 in Nova Scotia (except in canneries from July to October), Quebec, and Ontario and for boys in Saskatchewan; and 15 in Alberta, Manitoba, and British Columbia and for girls in Saskatchewan.

Labour in shops is prohibited by children under 14 years of age in Ontario and Quebec, under 15 in Manitoba, and in cities of over 5,000 population in Alberta. Only in Ontario does the provincial law directly forbid children engaging in street trades, the age-limit being 12 for boys and 16 for girls during the day. Municipal by-laws may be made in practically all the provinces to regulate the work of children as messengers, vendors of newspapers and small articles.

Compulsory school attendance laws are in effect in all the provinces but New Brunswick and Quebec, and employment of children of school age during school hours is prohibited. In New Brunswick special legislation requires attendance up to 14 years in six cities and towns; in the remainder of the provinces attendance at school is compulsory only at local option. The school-leaving age is 12 in rural New Brunswick if a by-law requires attendance, 13 in Prince Edward Island, 14 in Nova Scotia and Manitoba and in Fredericton, Saint John, Newcastle, Chatham, Marysville, and Edmundston in New Brunswick, 15 in Alberta, British Columbia, and Saskatchewan, and 16 in Ontario, in the towns and cities of Nova Scotia and in such urban districts of New Brunswick as adopt a by-law to that effect. Higher ages may be fixed by the district in Manitoba and in rural Nova Scotia. In Manitoba a child who is not employed must attend school until 16 years of age. Exemption from school attendance for a certain period or after a certain age is permitted under all the provincial laws but that of British Columbia. In Ontario no child between 14 and 16 years of age may be employed between 8 a.m. and 5 p.m. and in Quebec no child under 16 may be employed unless he can read and write fluently or is attending night school.

Mining and Factory Laws.—In all the provinces but Prince Edward Island, provision is made for inspection with a view to the safety and health of those employed. The Factory Acts give general powers to the inspectors to order proper measures to be taken. Only in Quebec and Ontario have special regulations been made. In the former province regulations have been made concerning ventilation, temperature, humidity, sanitary conditions, dust, etc., and prohibiting the employment of women and young persons in certain hazardous trades. In Ontario, by regulation, occupational diseases are required to be notified, containers of lead and benzol labelled, medical examination of workers may be required and special precautions must be taken to control dust. All the Mining Acts, in addition to giving general authority to inspectors to direct dangerous conditions to be remedied, lay down detailed regulations to ensure safe conditions of work.

Workmen's Compensation.—Compensation is provided in all the provinces but Prince Edward Island for accidents occurring in the course of employment and for certain industrial diseases. In Prince Edward Island railway workers are taken care of in this respect by a Dominion statute and are eligible for compensation at the same rate as in New Brunswick. Each province except Prince Edward Island has set up a board to administer an accident fund made up of contributions from employers who are classified according to the hazard of the industry and assessed accordingly. Employers in each class are thus collectively liable for accidents in the industries within the class and assessments are based on their accident record. In Ontario and Quebec public authorities, railway and shipping companies, and telephone and telegraph companies are individually liable for compensation. The industries covered vary from one province to another but in all provinces the most hazardous industries are within the scope of the Act, including mining, lumbering, manufacturing, construction, and transportation by rail and water. In Alberta and Saskatchewan certain classes of railroad employees are within an earlier employer's liability law.

Free medical aid, including medical, surgical, hospital and nursing services, is provided for injured workmen in all provinces but Alberta and British Columbia. In British Columbia the workers contribute 1 cent a day for medical aid and in Alberta they contribute from $\frac{1}{4}$ to 10 cents a day according to the industry.

Compensation is paid in all provinces for anthrax and for poisoning from arsenic, lead, mercury, and phosphorus. The other diseases compensated vary according to the industries of the different provinces.

The following statement shows the scale of compensation as at Jan. 1, 1938:—

Item.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
Death—								
Funeral.....	\$100	\$100	\$125	\$125	\$150	\$125	\$125	\$100
Widow or invalid widower per month.	\$30	\$30	\$40 plus lump sum of \$100.	\$40 plus lump sum of \$100.	\$40	\$40 plus lump sum of \$100.	\$35	\$35
Each child ¹ under 16, per month.	\$7-50	\$7-50, up to 18 years if a girl.	Under 18, \$10.	\$10 up to \$40.	\$12+\$10+ \$9+\$8 for each additional child up to 18 yrs. for educa- tion.	\$10	\$12+\$10+ \$9+\$8 for each additional child up to 18 yrs. for educa- tion.	\$7-50
Orphan child under 16, per month.	\$15, Max. \$60.	\$15 and up to 18 yrs. if a girl.	Under 18, \$15.	\$15	\$15	\$15	\$15	\$15, Max. \$60.
Disability ² —Per cent of earnings for duration.	66 $\frac{2}{3}$ p.c. Min. \$8 per wk. or earn- ings, if less.	55 p.c. Min. \$6 per wk. or earn- ings, if less.	66 $\frac{2}{3}$ p.c. Min. \$12-50 per wk. or earnings, if less.	66 $\frac{2}{3}$ p.c. Min. \$12-50 per wk. or earnings, if less.	66 $\frac{2}{3}$ p.c. Min. \$15 per wk. or earn- ings, if less.	66 $\frac{2}{3}$ p.c. Min. \$12-50 per wk. or earnings, if less.	66 $\frac{2}{3}$ p.c. Min. \$10 per wk. or earn- ings, if less.	62 $\frac{1}{2}$ p.c. Min. \$10 per wk. or earn- ings, if less.
Maximum earnings that may be reckoned.	\$1,500	\$1,500, Max. comp. \$2,500.	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000

¹ Invalid child entitled to compensation for longer period. ² Where disability is partial, the same rate is fixed but is calculated on difference between earnings prior to and subsequent to accident. In Quebec the rate for partial disability is 66 $\frac{2}{3}$ p.c. for the period of time fixed, basis being 4 weeks for each 1 p.c. of incapacity. In New Brunswick the Board may fix amount for permanent partial disability.

Section 13.—Legislation Respecting Combinations in Restraint of Trade.

A general article on Canadian legislation concerning combinations and monopolies in restraint of trade was published in the 1927-28 Year Book under the heading "Legislation Respecting Combinations in Restraint of Trade". In subsequent issues of the Year Book an annual statement on proceedings under the Combines Investigation Act has been included.

The first Dominion legislation in this field was "An Act for the Prevention and Suppression of Combinations formed in Restraint of Trade", passed in 1889 and now in force in amended form as Sec. 498 of the Criminal Code. Legislation providing special facilities for the investigation of combines was first enacted in 1907 and was included in the Customs Tariff of 1907. In 1910 the Combines Investigation Act of that year was enacted. The latter Act was replaced by the Combines and Fair Prices Act, 1919, which in turn, after declaration of its constitutional invalidity by the Judicial Committee of the Privy Council, was replaced by the present Combines Investigation Act in 1923.

The Combines Investigation Act.—The Combines Investigation Act (R.S.C., 1927, c. 26) provides means for the investigation of trade combinations, mergers, trusts and monopolies alleged to have operated in restraint of trade and to the detriment of the public. The Act was passed in 1923 and amended in 1935 and 1937. In 1931 its constitutional validity was upheld by the Judicial Committee of the Privy Council following a reference of questions on this point by the Governor in Council to the Supreme Court of Canada. The Combines Investigation Act provides for publication of reports of investigations of alleged combines. Participation or knowing assistance in the formation or operation of combinations or monopolies which are detrimental to the public and come within the scope of the Act is an indictable offence. Provision also is made in the Act for the reduction or removal of customs duties at the instance of the Governor in Council in cases where it is found that with respect to any commodity there exists any combine to promote unduly the advantage of manufacturers or dealers at the expense of the public and that such disadvantage to the public is facilitated by existing customs duties.

Legislation in 1937.—The Combines Investigation Act Amendment Act, 1937, which came into effect on Apr. 10, 1937, provided for the administration of the Combines Investigation Act by a Commissioner reporting to the Minister of Labour. It also removed amendments added to the Act at the instance of the Senate in 1935 whereby documents required to be produced in investigations under the Act had been rendered inadmissible as evidence in possible subsequent prosecutions under the Act against the persons who had produced them. Provisions of the Combines Investigation Act respecting revocation of patents were repealed in view of a revision of related provisions of the Patent Act effected in 1935 and in view of the terms of an International Convention ratified by Canada with regard to patents. Certain further amendments, introduced for the purpose of strengthening the Combines Investigation Act in a number of respects, were included in the amending Bill of 1937 as passed by the House of Commons but were deleted in the Senate and not enacted.

Investigations in 1937.—An investigation under the Inquiries Act was made into the importation and distribution of anthracite coal, following the similar inquiry made under the Combines Investigation Act and the court actions which had been completed in 1935 in connection with that case. The report of the Commissioner appointed to conduct the inquiry, was made public in February, 1937. The Commissioner found no evidence as to price-fixing arrangements. He reported

that importers' gross margins, which had increased in the years preceding the first inquiry, had declined substantially since 1933. This change, he considered, was due in large measure to the proceedings under the Combines Investigation Act in 1933. His recommendations included maintenance of competitive conditions with respect to sources of supply and in the distribution of anthracite coal; with enforcement by municipalities of regulations to prevent fraudulent practices and inadequate descriptions of coal.

Other less extensive investigations were made during the year under the Combines Investigation Act with respect to complaints regarding conditions alleged to be existing to the detriment of the public in particular manufacturing and distributive trades. These included questions of alleged price agreements among manufacturers or distributors, exclusive dealing arrangements, resale price maintenance, price discrimination, the withholding of supplies for various reasons and other trade practices alleged in particular instances to be unfair to certain classes of persons and to be injurious to the general public.

Section 14.—Mothers' Allowances.

Seven of the nine provinces of Canada provide for the payment of allowances to mothers who are widowed or without adequate means of support. The province of Manitoba was the first to make such provision in 1916, and the example has been followed by the other western provinces and by Ontario, Nova Scotia, and Quebec. The Mothers' Allowances Act, 1930, of New Brunswick has not been proclaimed in effect, and no action has been taken under the Quebec statute.

All the mothers' allowances Acts stipulate that the mother must be a resident of the province at the time of making application and a widow or, in all provinces but New Brunswick and Nova Scotia, a wife, whose husband is mentally incapacitated. Under all the laws, except those of New Brunswick, Nova Scotia, and Quebec, the wife of a physically disabled man is eligible but the section in the Alberta Act bringing such persons within its scope has not been proclaimed.

In Alberta, British Columbia, Ontario, and Saskatchewan, deserted wives are paid an allowance, and in British Columbia and Saskatchewan, the wives of inmates of penal institutions are eligible. Under all the statutes except those of Alberta and Saskatchewan, the mother must be a British subject, or the widow or wife of a British subject. Allowances may be paid to foster-mothers under certain conditions in all the provinces but Alberta, Nova Scotia, and New Brunswick.

In New Brunswick, Nova Scotia, and Quebec, allowances are payable in respect of two or more dependent children, but in New Brunswick and Nova Scotia an allowance is payable for one child under 16 if there is an invalid child over 16 years of age. In the other provinces, allowances are payable in respect of one or more dependent children, but in Manitoba, under the regulations, no allowance is payable in respect of an only child, or an only child under 15 years of age unless the mother is temporarily or permanently unable to care for the child. A dependent child is a child under 16 years of age in British Columbia, New Brunswick, Nova Scotia, Ontario, Quebec, and Saskatchewan. In Alberta, a boy under 15 or a girl under 16 is deemed to be

dependent. In Manitoba, only children under 15 are regarded as dependent unless they are invalids.

In Alberta, British Columbia, and Manitoba, the cost of the allowances is divided between the province and the municipalities concerned. In Saskatchewan, Ontario, Quebec, New Brunswick, and Nova Scotia, the whole cost is carried by the province.

Rates of Allowances.—In British Columbia, the Act provides for a maximum monthly allowance of \$42.50 for a mother with one dependent child, an additional \$7.50 for each other child under 16 years of age, and a further \$7.50 in cases where the husband of the mother is totally disabled and is living with her. In New Brunswick and Nova Scotia, a maximum allowance of \$60 per month is fixed by statute. In the other provinces, the provincial authority administering the Act has power to fix the rate of the allowance. In Ontario, the maximum for a mother and one child is \$35 per month in a city, \$30 in a town of over 5,000 population and \$25 in a rural district, with an additional \$5 for every child in each case. In Saskatchewan, under the terms of an Order in Council of January, 1936, maximum monthly payments range from \$8 to a mother with one child to \$44 to a mother with ten or more children.

In Manitoba, the maximum allowance for a mother and two children is \$50, excluding allowance for winter fuel, with a maximum of \$89 for a family of seven or more children. In Alberta, the allowance is determined by the special circumstances in each case, the maximum payment ranging from \$25 per month to a mother with one child, to \$50 per month where there are five children.

Tables 31 to 36 show, for six provinces, the numbers of families and of children assisted, the total benefits paid, and the division of the cost of the latter between provinces and municipalities, for as many years as comparable figures are available.

Nova Scotia.—The Mothers' Allowances Act (c. 4, 1930) was passed at the session of 1930 and came into force on Oct. 1, 1930. Table 31 shows the numbers of families assisted and the amounts paid under the Act from its inception to Nov. 30, 1936.

31.—Mothers' Allowances in Nova Scotia, fiscal years 1931-36.

Fiscal Year.	Numbers Assisted.		Benefits Paid.
	Families.	Children.	
			\$
1931 (year ended Sept. 30)	1,030	3,179	310,602
1932 " " "	1,108	3,342	331,337
1933 " " "	1,158	3,487	341,929
1934 " " "	1,168	3,549	356,075
1935 (14 months ended Nov. 30)	1,239	3,720	413,997
1936 (year ended Nov. 30)	1,222	3,630	363,981

Ontario.—The Mothers' Allowances Act (R.S.O., 1927, c. 280) was originally passed at the session of 1920, as c. 89 of the Statutes of that year, and came into force on Oct. 1, 1920. Table 32 shows the operations under the Act from its inception.

32.—Mothers' Allowances in Ontario, fiscal years 1921-37.

Fiscal Year.	Numbers Assisted.		Benefits Paid.		
	Families.	Children.	Chargeable to Province.	Chargeable to Municipalities.	Total.
			\$	\$	\$
1921 (year ended Oct. 31).....	2,660	8,271	416,152	358,515	774,667
1922 " ".....	3,559	10,922	762,059	620,079	1,382,138
1923 " ".....	3,870	11,791	889,252	723,449	1,612,701
1924 " ".....	4,058	12,374	939,522	768,372	1,707,894
1925 " ".....	5,007	14,577	974,174	807,107	1,781,281
1926 " ".....	5,215	15,115	1,027,518	849,367	1,876,885
1927 " ".....	5,540	16,060	1,101,817	905,740	2,007,557
1928 " ".....	5,976	17,328	1,203,920	986,487	2,190,407
1929 " ".....	6,411	18,605	1,260,299	1,045,784	2,306,083
1930 " ".....	6,712	19,620	1,292,245	1,084,743	2,376,988
1931 " ".....	7,157	20,906	1,400,418	1,181,468	2,581,886
1932 " ".....	7,418	21,468	1,455,100	1,234,627	2,689,727
1933 " ".....	7,653	22,068	1,516,260	1,285,613	2,801,873
1934 " ".....	8,144	23,173	1,640,283	1,385,872	3,026,155
1935 (Nov. 1, 1934, to Mar. 31, 1935).....	7,875	22,417	745,885	634,080	1,379,965
1936 (year ended Mar. 31).....	11,189	26,697	2,133,490	1,813,326	3,946,816
1937 " ".....	12,856	28,700	2,477,631	2,104,916	4,582,547

Manitoba.—The Mothers' Allowances Act (1916, c. 69), the first of its kind in Canada, came into operation on Mar. 10, 1916. Allowances are now made under the authority of the Child Welfare Act (1936, c. 6). Table 33 shows the benefits paid since Dec. 1, 1918, together with statistics of families and children assisted, these latter figures are not available for all of the earlier years.

33.—Mothers' Allowances in Manitoba, fiscal years 1919-37.

Fiscal Year.	Numbers Assisted.		Benefits Paid.		
	Families. ¹	Children.	Chargeable to Province.	Chargeable to Municipalities.	Total.
			\$	\$	\$
1919 (year ended Nov. 30).....	413	2	107,651	95,833	203,484
1920 " ".....	532	2	157,484	193,360	350,844
1921 ³ (year ended Aug. 31).....	648	2	212,237	225,000	437,237
1922 " ".....	669	2	179,060	150,199	329,259
1923 " ".....	722	2,609	236,399	225,749	462,148
1924 " ".....	728	2	185,661	220,359	406,020
1925 ⁴ (year ended Apr. 30).....	756	2	144,590	150,937	295,527
1926 " ".....	825	2,507	172,425	229,796	402,221
1927 " ".....	855	2,595	183,924	230,000	413,924
1928 " ".....	967	2,986	286,798	244,559	531,357
1929 " ".....	1,062	3,239	276,144	281,477	557,621
1930 " ".....	1,055	3,180	100,979	384,081	485,060
1931 " ".....	1,042	3,326	140,545	325,194	465,739
1932 " ".....	1,070	3,412	471,704	Nil	471,704
1933 " ".....	1,078	3,374	432,615	Nil	432,615
1934 " ".....	1,092	3,313	438,649	Nil	438,649
1935 " ".....	1,110	3,302	440,769	Nil	440,769
1936 " ".....	1,140	3,386	444,569	Nil	444,569
1937 " ".....	1,141	3,271	445,549	Nil	445,549

¹ Except where otherwise indicated, these figures show the total numbers of families assisted during the year. ² Not available. ³ Dec. 1, 1920, to Aug. 31, 1921. ⁴ Sept. 1, 1924, to Apr. 30, 1925.

Saskatchewan.—Mothers' allowances are paid under the authority of Part VI of the Child Welfare Act (R.S.S., 1930, c. 231), originally enacted in 1917 as the Mothers' Pensions Act. Table 34 shows the numbers of families assisted and the amounts paid under the Act for the fiscal years ended Apr. 30, 1929-37.

34.—Mothers' Allowances in Saskatchewan, fiscal years ended April 30, 1929-37.

Fiscal Year.	Number Assisted.		Benefits Paid.
	Families.	Children.	
			\$
1929.....	1,214	4,657	521,880
1930.....	1,800	5,465	467,575
1931.....	2,183	6,590	544,250
1932.....	2,372	6,431	483,618
1933.....	2,511	6,733	403,915
1934.....	2,608	6,794	407,993
1935.....	2,826	7,368	440,580
1936.....	2,944	7,638	474,120
1937.....	2,958	7,487	482,411

Alberta.—The Mothers' Allowance Act (R.S.A., 1922, c. 215) was originally passed at the session of 1919, and came into force in that year. Table 35 shows the numbers of families assisted and the amounts paid under the Act from its inception to Mar. 31, 1937.

35.—Mothers' Allowances in Alberta, 1919-37.

Year.	Number Assisted.		Benefits Paid.		
	Families.	Children.	Chargeable to Province.	Chargeable to Municipalities.	Total.
			\$	\$	\$
1919 (calendar year).....	245	766	19,714	19,714	39,428
1920 ".....	477	1,502	80,642	76,787	157,429
1921 ".....	562	1,636	103,572	98,302	201,874
1922 ".....	721	1,864	126,122	120,629	246,751
1923 ".....	758	1,887	122,651	120,035	242,686
1924 ".....	742	2,136	129,242	128,169	257,411
1925 ".....	828	2,271	142,004	141,582	283,586
1926 ".....	907	2,290	157,272	157,013	314,285
1927 ".....	968	2,445	174,500	174,440	348,940
1928 ".....	1,029	2,517	182,382	182,222	364,604
1929 ".....	1,094	2,880	198,378	198,377	396,755
1930 ".....	1,270	3,409	234,828	231,708	466,536
1932 (year ended Mar. 31).....	1,499	3,747	242,314	237,293	479,607
1933 ".....	1,675	3,882	222,606	216,590	439,196
1934 ".....	1,724	4,060	223,262	216,721	439,983
1935 ".....	1,812	4,274	233,904	228,489	462,393
1936 ".....	2,088	4,764 ¹	257,327	250,175	507,502
1937 ".....	2,319	5,172 ¹	410,872	164,636	575,508

¹ Subject to revision.

British Columbia.—The Mother's Pensions Act (R.S.B.C., 1936, c. 194) was originally passed as c. 61 of the Acts of 1920, and came into force in July, 1920. Table 36 shows the numbers of families and the numbers of children assisted, together with the amounts expended in each of the fiscal years 1921-37.

Under the original Act, the full cost of pensions was borne by the province. In 1932 one-half of the costs of pensions paid to residents of a municipality was charged to the municipality to which they belonged and at the end of the fiscal year 1936-37 responsibility for all payments was again assumed by the province.

In 1937 there were 346 cases where mothers received extra allowances for incapacitated husbands.

36.—Mothers' Allowances in British Columbia, 1921-37.

Fiscal Year.	Numbers Assisted. ¹		Benefits Paid. ²		
	Families.	Children.	Chargeable to Province.	Chargeable to Municipalities.	Total.
			\$	\$	\$
1921.....	"	"	"	"	273,575
1922.....	771	1,978	487,888	Nil	487,888
1923.....	785	1,990	414,227	Nil	414,227
1924.....	847	2,240	423,233	Nil	423,233
1925.....	943	2,544	463,669	Nil	463,669
1926.....	986	2,723	518,471	Nil	518,471
1927.....	1,100	3,050	612,645	Nil	612,645
1928.....	1,233	2,757	628,600	Nil	628,600
1929.....	1,370	3,028	677,510	Nil	677,510
1930.....	1,468	3,229	759,698	Nil	759,698
1931.....	1,568	3,295	816,272	Nil	816,272
1932.....	1,547	3,213	842,977	Nil	842,977
1933.....	1,514	3,274	468,511	311,129	779,640
1934.....	1,436	3,147	469,916	151,586	621,502
1935.....	1,410	2,922	365,288	224,334	589,622
1936.....	1,485	3,026	403,558	212,997	616,555
1937.....	1,567	3,191	443,803	238,785	682,588

¹ Years ended Sept. 30 for 1921-32, and fiscal years ended Mar. 31 from 1933.

Mar. 31 in all cases.

² Not available.

² Fiscal years ended

PART II.—WAGES AND COST OF LIVING.

Section 1.—Wage Rates.*

Statistics of rates of wages and hours of labour have been collected for recent years by the Dominion Department of Labour, and are published in a series of bulletins supplementary to the *Labour Gazette*. Report No. 1 of this series was issued in March, 1921. The records upon which the statistics are based begin in most cases with the year 1901. Index numbers have been calculated to show the general movement of wage rates; the series covers six groups of occupations back to 1901, and common factory labour, miscellaneous factory trades and lumbering back to 1911. The index numbers are based upon wage rates in 1913 as 100. Average index numbers, weighted according to the average numbers of employees in each group, as shown in the Censuses of 1921 and 1931, are also given. Weighting has not been applied within groups. In groups by occupations or industries such

* See pp. 774-783 of the 1927-28 Year Book for an article on the "Wages Statistics of the Census of 1921" and pp. 797-799 of the 1933 Year Book for "Earnings in the Census Year 1931".

as these, weighting makes comparatively little difference as rates of wages for the various classes of labour tend to rise and fall to the same extent even in different localities. In the three groups, common factory labour, miscellaneous factory trades, and logging and sawmilling, the index numbers being calculated from samples, the averages are automatically weighted by the numbers of samples which vary according to the numbers of workers in the various occupations and industries. The upward movement which appeared in the index numbers for some groups in 1934 became general in 1935 and continued in 1936 and in 1937. On steam railways wages were not changed in 1936 but were increased in 1937.

1.—Index Numbers of Rates of Wages for Various Classes of Labour in Canada, 1913-37.

NOTE.—Rates of wages in 1913=100. Index numbers for 1901-12 were given at p. 674 of the 1932 Year Book.

Year.	Building Trades.	Metal Trades.	Printing Trades.	Electric Railways.	Steam Railways.	Coal Mining.	Common Factory Labour.	Miscellaneous Factory Trades.	Logging and Sawmilling.	General Average, Weighted. ¹
1913.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1914.....	100.8	100.5	102.4	101.0	101.4	101.9	101.0	103.2	94.7	101.3
1915.....	101.5	101.5	103.6	97.8	101.7	102.3	101.0	106.2	89.1	102.2
1916.....	102.4	106.9	105.8	102.2	105.9	111.7	110.4	115.1	109.5	109.5
1917.....	109.9	128.0	111.3	114.6	124.6	130.8	129.2	128.0	130.2	125.6
1918.....	125.9	155.2	123.7	142.9	158.0	157.8	152.3	146.8	150.5	147.2
1919.....	148.2	180.1	145.9	163.2	183.9	170.5	180.2	180.2	169.8	173.4
1920.....	180.9	209.4	184.0	194.2	221.0	197.7	215.3	216.8	202.7	207.7
1921.....	170.5	186.8	193.3	192.1	195.9	208.3	190.6	202.0	152.6	189.9
1922.....	162.5	173.7	192.3	184.4	184.4	197.8	183.0	189.1	158.7	180.2
1923.....	166.4	174.0	188.9	186.2	186.4	197.8	181.7	196.1	170.4	184.2
1924.....	169.7	175.5	191.9	186.4	186.4	192.4	183.2	197.6	183.1	186.4
1925.....	170.4	175.4	192.8	187.8	186.4	167.6	186.3	195.5	178.7	185.1
1926.....	172.1	177.4	193.3	188.4	186.4	167.4	187.3	196.7	180.8	186.3
1927.....	179.3	178.1	195.0	189.9	198.4	167.9	187.7	199.4	182.8	190.4
1928.....	185.6	180.1	198.3	194.1	198.4	168.9	187.1	200.9	184.3	192.2
1929.....	197.5	184.6	202.3	198.6	204.3	168.9	187.8	202.1	185.6	196.0
1930.....	203.2	186.6	203.3	199.4	204.3	169.4	188.2	202.3	183.9	197.1
1931.....	195.7	182.9	205.1	198.6	199.2	169.4	183.4	197.3	163.0	189.1
1932.....	178.2	174.7	194.2	191.1	183.9	164.0	173.6	184.3	141.3	177.7
1933.....	158.0	169.2	184.3	182.7	179.7	161.9	168.1	175.7	121.7	168.3
1934.....	154.8	168.0	183.5	182.4	173.7	162.9	170.8	180.5	145.1	170.5
1935.....	159.8	169.7	184.5	183.7	183.9	165.8	174.9	184.7	152.3	175.4
1936.....	160.8	170.1	185.2	185.5	183.9	165.9	179.7	188.8	165.9	178.6
1937.....	165.3	187.4	187.8	190.5	196.1	166.8	195.5	203.7	188.1	191.7

¹ Weighted according to average numbers of workers in each group in 1921 and 1931.

Rates of wages and hours of labour in 1937 in various trades in the largest cities of the five economic areas of Canada will be found in Table 2. The attention of those specially interested in the subject of wages and hours is directed to the valuable detailed study, *Wages and Hours of Labour in Canada, 1929, 1936 and 1937*, published by the Department of Labour as a supplement to the *Labour Gazette*, January, 1938.

2.—Rates of Wages and Hours of Labour in Various Trades and for Unskilled Factory Labour in Certain Cities of Canada, 1937.¹

Occupation.	Halifax.		Montreal.		Toronto.		Winnipeg.		Vancouver.	
	Wages per Hour.	Hours per Week.	Wages per Hour.	Hours per Week.	Wages per Hour.	Hours per Week.	Wages per Hour.	Hours per Week.	Wages per Hour.	Hours per Week.
1. Building Trades—	\$		\$		\$		\$		\$	
Bricklayers and masons....	.97½	44	.80--90	44-48	.90	40	1.10	44	1.10	40
Carpenters.....	.60	44	.70	44-48	.85	40-44	.85	44	.90	40-44
Electrical workers.....	.80	44	.75	44-48	1.00	40	.85	44	.75-1.00	40-44
Painters.....	.50--55	44	.66	44-48	.75	40	.70	44	.62½--80	40-44
Plasterers.....	.70--80	44	.80	44-48	.90	40	1.10	44	1.00	40
Plumbers.....	.75	44	.75	40-44	.90	40	.95	44	1.00	40-44
Sheet-metal workers.....	.65--70	44	.65--70	40-44	.87½	40	.70	44	1.00	40-44
Stonecutters.....	.70	44	.80	44	.87½	40	.90	44	1.00	40
Labourers.....	.30--40	44-48	.40	44-48	.35--60	40-48	.40--45	44-48	.45--50	40-48
2. Metal Trades—										
Blacksmiths....	.55--90	40-44	.40--90	40-55	.52½--70	40-48	.40--72	44-58	.70--95	40-44
Boilermakers....	.63--90	40-44	.50--90	40-47	.55--70	44	.57½--76	50	.70--95	40-44
Machinists.....	.68--90	40-55	.50--85	40-55	.52--80	40-50	.50--75	44-50	.65--95	40-44
Moulders.....	.65--70	40-48	.55--80	40-45	.50--80	40-48	.52½--78	44-50	.70--77	40-44
3. Printing Trades—	Wages per Week.		Wages per Week.		Wages per Week.		Wages per Week.		Wages per Week.	
Compositors, machine and hand, news..	34.00	48	36.00--45.50	48	42.50	40	40.00	46	43.20	45
Compositors, machine, and hand, job....	25.00--33.45	44-48	31.20--40.00	44-48	33.00--40.00	40-48	35.20	44-48	40.50	44-48
Pressmen, news	24.00--34.00	48	32.00--43.00	48	48.50	48	39.00	48	43.20	48
Pressmen, job..	24.25--26.00	44-48	31.20--36.00	44-48	33.00--40.00	40-48	35.20	44-48	40.50	44-48
Bookbinders...	27.00--35.00	44-48	31.20--36.00	48	33.00--40.00	44-48	33.00--38.00	44-48	38.00--45.00	44-48
Bindery girls...	11.00	44-48	12.50--15.00	48	12.00--18.00	44-48	11.00--18.00	44-48	14.00--20.25	44-48
4. Electric Railways—	Wages per Hour.		Wages per Hour.		Wages per Hour.		Wages per Hour.		Wages per Hour.	
Conductors and motormen ²61	53	.55	54	.60	44-48	.52	42	.63	48
Linemen.....	.55--77	44	.53--57	40-48	.72--78	44	.45--86	44-48	.68½--97	40-48
Shop and barn men.....	.51--77	44-56	.30--62	40	.54--81	44-48	.39½--65	44-48	.52--75	44
Electricians....	.73--82	44-56	.55--65	40	.57½--79	44-48	.53--65	44-48	.70--75	44
Trackmen and labourers....	.35--55	44	.35	48	.45--60	48	.38½--39½	48	.50--54	44
5. Unskilled Factory Labour.	.34½--39	44-55	.25--55	40-60	.30--54	25-54	.31½--55	44-50	.40--60	40-48

¹ For statistics of the wages and hours of employees of steam railways and wages of employees in and about coal mines in Canada, see pp. 751-752 of the 1930 Year Book, where the rates, etc., for the past seven or eight years to 1929, are given. Wages in coal mines of Nova Scotia were reduced 10 p.c. in 1932, and in Drumheller, Alta., in 1933; in 1935 in both districts 5 p.c. was restored. On steam railways deductions of 10 p.c. were in effect during 1932, 1933, 1935 and 1936; 15 p.c. in 1934; running trades 20 p.c. for six months in 1933. In 1937 the deduction was reduced gradually from 10 p.c. to 4 p.c. In editions of the Year Book prior to 1933 a table showing the wages and hours of common labour in factories for certain cities was given in this section. The information for 1937 can be found at p. 61 of *Wages and Hours of Labour in Canada*, published as a supplement to the *Labour Gazette* for January, 1938. For the five cities of Table 2 it is included under sub-heading 5 of the stub.

² Maximum rates based on length of service; Halifax rate for one-man cars; 5 cents extra for one-man car operators in Montreal, Toronto, and Winnipeg; Vancouver 6 cents extra.

Section 2.—Wages and Hours of Labour Under Provincial Minimum Wage Legislation.

All of the provinces in Canada except Prince Edward Island have in effect legislation providing for the establishment of minimum wage rates for female employees in certain industries and occupations through boards which are authorized to establish and enforce these minimum rates. Such legislation was enacted between

1918 and 1920 in all of these provinces except New Brunswick. In Nova Scotia the legislation is applicable to female workers only, but in the other provinces it now applies both to male and female workers. There is also legislation for the restriction of hours of labour which are regulated in some of the provinces by the minimum wage boards but in the others only under the factory acts, etc. (See Section 12 of Part I on Labour Legislation in 1937.)

In British Columbia since 1925, and in Manitoba since 1931, separate orders have been effective for some classes of male workers and their scope was much extended in 1934 and subsequent years. In New Brunswick, under the Fair Wage Act, 1936, the establishment of wage rates was authorized but no orders of general application had been issued at the end of 1937. In Saskatchewan since 1936, and in Quebec from 1937, all minimum wage orders for females apply also to male workers. In Alberta, separate orders for male workers were issued in 1937 for the first time. In Ontario, under the Minimum Wage Act, 1937, the legislation was extended to male workers but no orders for males had been made effective at the end of 1937. In Quebec and New Brunswick, wages in logging are regulated under forestry regulation acts.

Beginning in Quebec in 1934, certain wage rates established through collective agreements were made binding under the Collective Labour Agreements Extension Act, 1934, and later under the Workmen's Wages Act, 1937. The Industrial Standards Acts of Ontario and Alberta in 1935, that of Nova Scotia in 1936 and of Saskatchewan in 1937 provided for the establishment of wage scales in various industries for all employees.

A supplement to the *Labour Gazette* for January, 1938, on wages and hours of labour in Canada in 1929, 1936, and 1937 contains an appendix giving, in some detail, information as to minimum wages for male and female workers.

Information as to minimum wage rates for work under Dominion Government contracts for the manufacture and supply of equipment, stores, clothing, etc., appears in the paragraphs on Fair Wages in the section on the Dominion Department of Labour at pp. 787-788.

Subsection 1.—Minimum Wages for Females.

The table on pp. 806-807 gives information as to minimum rates of wages and as to hours for which these rates are payable under the orders of the various provincial boards and commissions in effect at the end of 1937.

The information here given is intended to afford merely a statistical summary of the minimum wages with hours of labour in the provinces and industries affected, and while some of the more significant details have been given in footnotes, it has been found impossible to include the information in such form as to indicate any more than the general conditions under these provisions.

For complete information it is necessary to refer to the orders as issued by the various provincial boards. These have been given in some detail in the *Labour Gazette* from time to time as issued, and in summary form, by provinces, in the Wages and Hours Supplement to the *Labour Gazette*, January, 1938. In some provinces these orders include regulations as to employment conditions, sanitary conditions, etc. The boards have power to issue licences for lower rates of pay for handicapped workers and to meet special conditions in the nature of emergencies.

3.—Minimum Wage Rates for Female Workers in Canada Under

NOTE.—For further details regarding minimum wage rates for females, see pp. 123-134 of *Wages and*

Industry.	Nova Scotia. ¹			Quebec. ²			Ontario. ³		
	Wages per Week.		Hours per Week.	Wages per Week.		Hours per Week.	Wages per Week.		Hours per Week.
	Adults, Experienced.	Minors, Learners, etc.		Adults, Experienced. ⁴	Minors, Learners, etc.		Adults, Experienced.	Minors, Learners, etc.	
	\$	\$		\$	\$		\$	\$	
1 Manufacturing.....	10-00- 11-00	6-00- 10-00	44-50	9-00- 12-50 ⁹	6-00- 11-00 ⁹	44-55	10-00- 12-50	6-00- 11-00 ¹⁰	48-54
2 Fruit and vegetable canning.....	14	14	14	12½c. per hr.	14	14	18-25c. per hr.	15-20c. per hr.	14
3 Laundering, dry clean- ing, etc.....	10-00- 11-00	6-00- 10-00	44-50	18-22c. per hr.	13-20c. per hr.	14	11-00- 12-50	8-00- 11-00	48
4 Retail stores.....	10-00- 11-00	6-00- 10-00	44-50	8-00- 12-50 ¹⁰	6-00- 10-00 ¹¹	40-60	8-00- 12-50	6-00- 11-00	48-54
5 Hotels, restaurants, etc.....	10-00- 11-00	8-00- 10-00	44-50	15-00- 22-00 ²⁰	14	14	20-26c. per hr.	14	14
6 Hairdressing, etc.....	10-00- 11-00	6-00- 10-00	48	10-00- 12-50	6-00- 11-00	48	10-00- 12-50 ²⁵	4-00- 10-50	48-54
7 Theatres and amuse- ment places.....	14	14	14	14	14	14	11-00- 12-50 ²⁶	14	48-54
8 Offices.....	10-00- 11-00	7-00- 10-00	48	14	14	14	8-00- 12-50 ²⁹	6-00- 11-00	48-54
9 Telephone operators...	9-00- 11-00	6-00- 10-00	44-50	14	14	14	7-00- 12-50	5-00- 11-00	48

¹ Rates apply to cities and incorporated towns.² Rates vary according to population and industry, the higher rates for Montreal and district; all rates apply to males as well as females.³ Rates vary according to locality and population.⁴ Rates apply generally throughout province, also to male workers in many cases and to boys under 18 in cities.⁵ Only in cities and within a radius of 5 miles; apply to males as well as females.⁶ Orders apply throughout the province except telephone exchange order which applies only in centres with population of 600 or over.⁷ Rates apply throughout the province. Provision made for washing, curing, packing, etc., (except canning) of fish as follows: experienced—\$15.50 per week (48 hours) or 32 ¾ cents per hour; minors, learners, etc.—\$12.75 to \$14.75 per week.⁸ In some industries, instead of a graduated scale according to experience, stipulated percentages of female workers in each establishment must receive the full minimum wage, while the remainder may work at lower minimum rates.⁹ Hourly rates are fixed for certain industries: adults, experienced—21 to 26 cents per hour; minors, learners, etc.—12½ to 22 cents. Establishments with less than 10 workers not covered by another order in municipalities of less than 5,000: adults, experienced—18 cents per hour; minors, learners, etc.—12 and 15 cents per hour.¹⁰ Custom millinery trades not in factories: minors, learners, etc.—\$5.00 to \$10.00.¹¹ 50 hours per week for tailoring, dressmaking, and millinery establishments.¹² Factory order includes garages and automobile service stations.¹³ Millinery shops, \$4.00-\$10.00 per week.¹⁴ Not reported.

Orders of Provincial Minimum Wage Boards, as at Dec. 31, 1937.

Hours of Labour, Report No. 21, issued as a supplement to the *Labour Gazette*, January, 1938.

Manitoba. ⁴			Saskatchewan. ⁵			Alberta. ⁶			British Columbia. ⁷		
Wages per Week.		Hours per Week.	Wages per Week.		Hours per Week.	Wages per Week.		Hours per Week.	Wages per Week.		Hours per Week.
Adults, Experienced.	Minors, Learners, etc.		Adults, Experienced.	Minors, Learners, etc.		Adults, Experienced.	Minors, Learners, etc.		Adults, Experienced.	Minors, Learners, etc.	
\$	\$		\$	\$		\$	\$		\$	\$	
10-00 12-00	6-00- 11-00 ¹⁰	48 ¹¹	12-00 ¹²	7-00- 11-00 ¹²	48	12-50	6-00- 11-00 ¹³	48	14-00	7-00- 13-00	48 1
14	14	14	14	14	14	14	14	14	30c. per hr.	14	14 2
10-00- 12-00	6-00- 11-00	48	13-00 ¹⁵	7-00- 11-00 ¹⁵	48	12-50	9-50- 11-50	48	13-50	8-00- 12-00	48 3
10-00- 12-00 ¹⁷	6-00- 11-00 ¹⁷	48	14-00 ¹⁸	6-00- 12-00 ¹⁸	48	12-50 ¹⁹	7-50- 11-00 ¹⁹	48	12-75	7-50- 12-00	48 4
9-60 and 12-00 ²¹	9-60	48	10-00- 12-00 ²²	8-00- 10-00	48	12-50 ²³	9-00- 11-00 ²³	48	14-00 ²⁴	12-00 ²⁴	48 5
12-00	8-00- 11-00	48	13-00	6-00- 12-00	48	14-00	6-00- 12-00	48	14-25	10-00- 13-00	14 6
12-00 ²⁷	14	48	14	14	14	14-00	14	48	14-25 ²⁸	14	48 7
12-50 ³⁰	8-00- 11-50 ³⁰	44	14	14	14	14-00 ³¹	7-50- 12-00 ³¹	48	15-00	11-00- 14-00	48 8
10-00- 12-00	14	48	14	14	14	14-00 ⁶	7-50- 12-00 ⁶	48	15-00 ³²	11-00- 13-00 ³²	48 9

¹⁵ Order includes fur-sewing, dressmaking, and millinery establishments.¹⁶ Apply also to departmental and chain stores and wholesale establishments.¹⁷ For both male and female employees; apply also to departmental stores and mail-order houses (under separate order).¹⁸ Apply also to wholesale and mail-order houses; delivery service provided for as follows: experienced—\$8-00; inexperienced—\$6-00 to \$8-00.¹⁹ Apply also to wholesale and mail-order houses.²⁰ Hotels, per month with room and board. Restaurants, 17 and 15 cents per hour.²¹ Higher rate applies to Winnipeg and district, and Brandon at any time; to Portage la Prairie, May to October, and to any summer resort, June to September.²² Or 25 cents an hour; adults, inexperienced—16½ cents per hour, first six months; 21 cents second six months.²³ Restaurants only—any place where meals provided.²⁴ Apply also to chambermaids in lodging houses and to elevator operators; there is a separate order for janitresses in apartment houses.²⁵ Shoe shine parlours in Toronto only, all \$12-50 (under separate order).²⁶ Or 25 to 30 cents per hour.²⁷ No minors to be employed.²⁸ Applies also to attendants at garages and automobile service stations, drivers of motor cars and other vehicles.²⁹ Apply also to elevator operators including learners (under separate order).³⁰ Winnipeg, St. Boniface and St. James, only.³¹ Apply also to attendants in physicians', dentists' and optometrists' offices.³² Apply also to telegraph employees.

In the preceding table figures for adult learners and for minors and apprentices are shown in a range covering both classes. There is wide variation in the rates for such classes in the several industries and the time allowed for such periods varies in most cases from one year to 18 months. Probationary periods (usually 3 months) without pay are allowed in some cases—beauty parlours, millinery, dress-making in shops, etc. Where no rates for minors, learners, etc., are shown the rates for experienced adults apply.

Subsection 2.—Minimum Wages for Male Employees.

Provisions for minimum wage rates for male employees are outlined in the Wages and Hours Supplement to the *Labour Gazette*, January, 1938, pp. 135-143, a summary of which follows:—

In Prince Edward Island, the city of Charlottetown, as authorized by an amendment to its incorporating Act, has established by by-law a minimum wage rate of 35 cents per hour for labourers and workmen engaged by contractors.

In New Brunswick, the Fair Wage Act, 1936, amended in 1937, provides for the establishment of minimum rates of wages and maximum hours for both male and female workers. Orders were issued in 1937 for a number of individual establishments but none of general application in any trade or industry. Under the Forest Operations Act, the Commission during 1937 established for stream-driving a minimum average rate of \$3 per day and board net, or its equivalent in case of piece work. For booming and sorting a minimum rate of 28 cents an hour without board was set. For cutting, yarding, and hauling, a minimum rate of \$34 and a minimum average rate of \$40 per month and board, net, were fixed.

In Quebec, the Fair Wage Act, 1937, replacing the Women's Minimum Wage Act, applies to both male and female workers and orders under the new Act provided that all existing minimum wage orders should apply to male as well as female workers in all the industries so covered until replaced by new orders. Under the Act to Assure Reasonable Wages for Workmen engaged in Forest Operations, a minimum of \$45 per month with board, was established except for youths 18 to 20 years for whom the minimum is \$30 per month with board; regular hours are limited to 60 per week.

In Ontario, until repealed in 1937, the Minimum Wage Act had provided that wherever a male employee replaces a female employee in any class of industry, the male employee must be paid at least the minimum rate established. This Act was replaced by the Minimum Wage Act, 1937, applying to both male and female workers. At the end of the year 1937, no orders had been issued under the new Act and the old orders were still in effect.

In Manitoba, the Minimum Wage Act provides that when a minimum wage scale has been established for any industry, no person of the age of 18 years or over may be paid less than 25 cents per hour except where the Board has passed specific regulations providing for a different rate. As all industries except farming, market gardening, and domestic service are now under regulation, the above minimum rate of 25 cents per hour for male persons of 18 years of age or over applies to all except where special regulations have been made, as follows: The orders governing manufacturing and general occupations, departmental stores and mail-order houses, retail and wholesale stores, and general employees apply to male as well as female employees. For hotels, restaurants, etc., the minimum for male workers over 18 is \$12 per week of 48 hours or 25 cents per hour in Greater Winnipeg and Brandon at any time and in Portage la Prairie and summer resorts during summer months, and \$10 per week of

48 hours or 21 cents per hour in the rest of the province. All orders apply to boys under 18 in cities except that special orders for boys under 18 in cities provide for minimum rates of \$8 to \$10 in manufacturing establishments, hotels, garages, etc. For apprentices, the rates specified in the indenture must have the approval of the Board but may not be less than the rates established in the industry for persons under 18 years. The Taxicab Act establishes for Greater Winnipeg a minimum of \$17.50 per week or 40 cents per hour with a minimum of \$1.60 per day, hours not to exceed 12 per day, 6 days per week. The Highway Traffic Act sets minimum rates for drivers of public passenger vehicles at \$80 per month or \$20 per week, 9 hours per day for driving, 12 hours in any capacity, 6 days per week. The Fair Wage Act provides for minimum wages and maximum hours on public works under contract, and also on private construction work as defined in the Act, under schedules approved by the Minister of Public Works.

In Saskatchewan, minimum wage rates for female employees now extend to male employees. The Coal Mining Industry Act, 1935, and an amendment to the Public Services Vehicles Act in 1935 provide for the establishment of minimum wage rates but none had been set by the end of 1937.

In Alberta, under the Male Minimum Wage Act, a general order covers all workers except those engaged in farm work and domestic service, those working under schedules under the Industrial Standards Act and casual, seasonal or temporary workers for employers not engaged in the industry, and except woodworking, etc., in rural districts. The general order establishes a minimum of 33½ cents per hour for full-time employees over 21 years with at least one year's experience and 28 and 30 cents for such employees with less than one year's experience; for full-time employees under 21 years, the minimum rates are from 20 cents for beginners to 33½ cents after three years' experience. Corresponding minimum rates for part-time employees are from 30 to 40 cents for those over 21 and from 23 to 35 cents for those under 21. A special order for employees of sawmills, box factories, woodworking, logging, and tie-cutting in rural districts provided minimum rates of 25 and 28 cents per hour. Under the Public Service Vehicles Act, 1936, an order provides for a minimum rate of \$15 per week of 6 days for taxi drivers in the city of Calgary.

In British Columbia, under the Male Minimum Wage Act, 1934, applying to all occupations except farm labourers and domestic servants, orders have been issued as to the following: logging, sawmilling, shingle, furniture and woodworking industries, baking, fruit and vegetable canning, preserving, etc., construction, the carpentry trade in Victoria and vicinity, shipbuilding, transportation (other than rail, water, or air), wholesale and retail establishments, stationary steam engineers, barbering (excluding beauty parlours), elevator operators, first-aid attendants, and janitors. In many instances the minimum rates for unskilled labour are 40 cents per hour for males over 21 years of age, 25 to 35 cents for those between 18 and 21, with 20 to 25 cents per hour for those under 18. In addition, the Female Minimum Wage Act, 1934, provided that where a minimum wage rate has been set for female workers in any industry, male workers may not be employed at work usually done by female employees at less than the fixed minimum wage.

Subsection 3.—Wages and Hours of Labour under Collective Agreements and Schedules of Wages and Hours Made Obligatory by Order in Council in Certain Provinces.

In Nova Scotia, under the Industrial Standards Act, 1936, minimum wage rates and standard hours have been fixed for bricklayers, carpenters, electrical workers, plumbers and steamfitters in Halifax and Dartmouth.

In Quebec, under the Collective Labour Agreements Extension Act, 1934, and the Workmen's Wages Act, 1937, which replaced it, wages and hours in agreements between representatives of employers and of workers have been extended and made compulsory for all employers in the trade or industry in the district affected, and were in effect at the end of 1937, as follows: for the whole province, in certain manufacturing industries, *viz.*, boots and shoes, gloves, men's and boys' clothing (except work clothing), children's clothing, women's coats and suits, dress cutting, furniture, also for granite, marble and stone quarrying; in practically all of the province, for building trades; in most of the cities and towns and in some villages for the barbering and hairdressing trades; in three districts, which include all cities of over 11,000 population, for job-printing trades; iron oxide mining and aluminium smelting in the only districts in which these industries are carried on; in the five largest cities and Sorel, for bakeries; in Sorel, for butchers; in the Montreal and Quebec districts, for ornamental iron and bronze work; in Montreal and district, for the fur industry and for women's and children's millinery; in Montreal, for longshoremens (inland navigation) and in Sorel, for all longshoremens; in Sorel, for taxi drivers; in four northern towns, for clerks and accountants; in four Eastern Township counties, for horseshoers and wheelwrights; in Montreal and Victoriaville, for shoe repairing.

In Ontario, under the Industrial Standards Act, 1935, wages and hours schedules have been made binding by Order in Council and were effective at the end of 1937, for the following industries: throughout the province, for breweries, furniture (wood and soft) factories, men's and boys' clothing factories, women's cloak and suit factories, and millinery shops; in four districts, for the logging industry; in Toronto and Ottawa, for the principal building trades; and in Kingston, Cornwall, Pembroke, Hamilton, Kitchener, London, Windsor, Sault Ste. Marie, Timmins, Port Arthur, and Fort William, for one or more of the building trades; and also in 31 cities and towns for barbers.

In Saskatchewan, under the Industrial Standards Act, 1937, schedules have been put into effect by Order in Council, as follows: one building trade in Moose Jaw and Saskatoon and two building trades in Regina; barbers and hairdressers in four districts; shoe repairing at Regina and sign painting at Moose Jaw.

In Alberta under the Industrial Standards Act, 1935, schedules have been put into effect by Order in Council and were effective at the end of 1937, as follows: throughout the province, for the brewing industry; in Calgary, Edmonton and the adjacent districts, for bakers; two building trades at Calgary and two at Edmonton and their surrounding districts; creosote workers at Calgary and taxi drivers at Edmonton.

Section 3.—Cost of Living of Wage-Earners.

An index number of the cost of living in working-men's families has been computed by the Department of Labour since 1913, and is published monthly in the *Labour Gazette*. This index is specifically designed for the purpose of measuring the trends of the cost of living for certain wage-earning classes with a somewhat lower standard of living than that which is measured by the Bureau of Statistics index number of retail prices, shown on pp. 819-823 of the present volume. The former wage-earners index is used extensively in negotiations as to wage rates and in the settlement of industrial disputes. An abridgment of this index is presented in Table 4.

4.—Changes in the Cost of Living in Canada from 1914 to 1937.

(Average prices in 1913=100.)

Year and Month.	Food.	Fuel and Light.	Rent.	Clothing.	Sundries.	All Items. ¹
1914, December	108	98	97	103	100	103
1915 "	111	96	94	115	110	107
1916 "	138	109	95	136	122	124
1917 "	167	125	102	158	134	143
1918 "	186	146	111	185	151	162
1919 "	201	148	122	210	164	176
1920 "	202	200	142	232	173	190
1921 "	150	172	150	177	173	161
1922 "	142	177	155	162	174	157
1923 "	146	172	158	164	171	159
1924 "	144	162	158	159	169	156
1925 "	157	166	158	159	166	160
1926 "	152	162	156	157	166	157
1927 "	152	158	156	155	166	157
1928 "	154	157	157	157	166	158
1929 "	161	157	158	156	166	160
1930 "	138	156	160	148	165	151
1931 "	107	152	158	127	163	135
1932 "	96	145	141	114	161	125
1933 "	100	142	129	113	157	123
1934 "	103	144	129	115	154	123
1935 "	111	141	132	115	154	127
1936—						
March	111	142	132	114	154	126
June	106	140	133	114	154	125
September	113	140	133	114	153	127
December	114	142	135	115	154	128
1937—						
January	115	141	135	115	154	129
February	116	141	135	115	154	129
March	116	141	135	117	154	129
April	116	141	135	117	154	130
May	117	139	140	117	154	131
June	116	138	140	117	154	130
July	117	138	140	118	155	131
August	120	138	140	118	155	132
September	119	138	140	118	155	131
October	119	139	142	118	157	132
November	120	140	142	118	157	132
December	120	140	142	118	157	133

¹ The figures for "All Items" were calculated by giving the following weights to each group: Food, 35 p.c.; Fuel, 8 p.c.; Rent, 18½ p.c.; Clothing, 18½ p.c.; Sundries, 20 p.c.

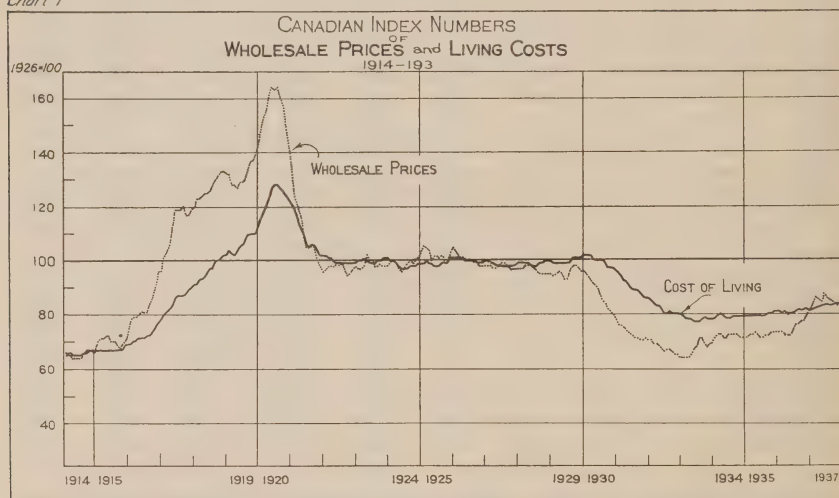
Section 4.—Earnings in the Census Year 1931.

The total number of wage-earners in Canada reporting earnings for the census year ended June 1, 1931, was 2,476,414 or 96.35 p.c. of all wage-earners and the total amount of their earnings was \$2,100,552,700. A table at p. 789 of the 1937 Year Book showed statistics of wage-earners, by sex, and their earnings, for the census years 1911, 1921, and 1931.

CHAPTER XX.—PRICES.*

For purposes of statistical analysis, commodity prices are usually divided into two principal groups, wholesale prices and retail prices. The term 'wholesale' is not used literally, and included in this group primary producers', factory, and jobbers' quotations are often found, as well as actual wholesale prices. Markets in which this type of price is quoted are usually well organized, and frequently very sensitive. They are responsive to changing business and monetary conditions. Wholesale quotations are accordingly preferred, therefore, for sensitive index numbers of prices designed to reflect price reactions to business factors, and for more general index numbers to furnish a basis of measuring changes in the purchasing power of money. Although possessing admitted defects, general wholesale price index numbers are widely used for this latter purpose.

Chart 1



Retail prices represent more diffused markets, and are less sensitive. There is ordinarily a lag of several months between this type of quotation and its wholesale counterpart. Retail prices are important from a statistical point of view, however, because they indicate changes in living costs and, along with measurements of income, show fluctuations in the economic well-being of the community.

Section 1.—Wholesale Prices of Commodities.

Subsection 1.—Historical Review of Canadian Prices.

Annual average index numbers for every year since Confederation are given in Table 1. In that table will be noted the high prices of 1867, following the close of the American Civil War and the Austro-Prussian War of 1866, and the tendency

* Revised by Herbert Marshall, B.A., F.S.S., 'Chief, Internal Trade Branch, Dominion Bureau of Statistics. This Branch compiles and publishes statistics on: Prices (wholesale, retail, securities, bond yields, services, exchange, cost of living), Retail and Wholesale Trade, Foreign Capital Investments in Canada and Canadian Investments Abroad, Balance of International Payments, and other related subjects. For a complete list of the publications of this Branch, the reader is referred to Chapter XXIX, Section I, under "Internal Trade".

to declining prices in subsequent years. Prices went up again after the Franco-German War of 1871 and reached a high point in 1872 and 1873, but the crisis of the latter year resulted in a decline. A downward trend persisted fairly steadily throughout the 25 years from 1872 to 1897, when the gold supply of the world did not increase as rapidly as the supply of commodities. This gold shortage was accentuated by the demonetization of silver, which ceased to be legal tender and was reduced to the level of token money by most nations. Relief came through the discoveries of gold in the Rand mines and the application of the cyanide process to low-grade ores. The result was a rapidly increasing world production of gold from about 1890 to the outbreak of the Great War, with consequent rising prices as the volume of the new gold became an appreciable part of the total stock. Thus prices increased from the low point of 75.6 in 1897 to 100 in 1913 and 102.3 in 1914. Afterwards, the Great War, both through the scarcity of commodities which it occasioned and the inflation of the currency which it produced, drove prices rapidly upward to a maximum of 243.5 in 1920, followed by a rapid drop to 152.0 in 1922. This was succeeded by a slight increase to 160.3 in 1925. The tendency from 1925 to 1929 was gradually downward, although the period was one of increasing prosperity.

Commencing in the autumn of 1929, the severe economic depression was accompanied by a drastic decline in wholesale prices. Its extent may be gauged from the drop of the wholesale price index from 153.7 in August, 1929, to 99.2 in February, 1933. A subsequent irregular rise carried this index upward to 132.1 in 1937, although the trend of prices was downward in the latter half of that year.

1.—Annual Index Numbers of Wholesale Prices in Canada, 1867-1937.

(1913=100.)

Year.	Index No.	Year.	Index No.	Year.	Index No.	Year.	Index No.
1867.....	133.0	1885.....	92.7	1903.....	86.9	1921.....	171.8
1868.....	128.7	1886.....	90.7	1904.....	87.0	1922.....	152.0
1869.....	126.5	1887.....	91.9	1905.....	87.8	1923.....	153.0
1870.....	123.5	1888.....	93.5	1906.....	92.6	1924.....	155.2
1871.....	124.5	1889.....	92.6	1907.....	96.2	1925.....	160.3
1872.....	135.7	1890.....	93.0	1908.....	90.9	1926.....	156.2
1873.....	133.8	1891.....	91.4	1909.....	91.4	1927.....	152.6
1874.....	129.0	1892.....	86.2	1910.....	94.3	1928.....	150.6
1875.....	120.7	1893.....	85.2	1911.....	95.0	1929.....	149.3
1876.....	116.6	1894.....	80.6	1912.....	99.5	1930.....	135.3
1877.....	115.1	1895.....	79.6	1913.....	100.0	1931.....	112.6
1878.....	104.3	1896.....	76.0	1914.....	102.3	1932.....	104.2
1879.....	101.0	1897.....	75.6	1915.....	109.9	1933.....	104.8
1880.....	112.9	1898.....	77.8	1916.....	131.6	1934.....	111.8
1881.....	109.9	1899.....	81.4	1917.....	178.5	1935.....	112.6
1882.....	112.1	1900.....	85.8	1918.....	199.0	1936.....	116.5
1883.....	106.0	1901.....	84.5	1919.....	209.2	1937.....	132.1
1884.....	100.6	1902.....	86.2	1920.....	243.5		

Subsection 2.—The Index Number on a Post-War Base (1926).

The official Canadian index numbers of wholesale prices, along with the other price indexes computed by the Dominion Bureau of Statistics, were revised in 1928, when the list of commodities included was increased from 236 to 502. The weighting system was extended to obtain a fairer distribution among sub-groups, and the base was shifted to the year 1926. By that time most of the leading countries of the world had completed the first phase of post-war currency reorganization, and a reasonable degree of price stability seemed to have been established. Commodities and weights were again revised at the beginning of 1934, bringing the total number of price series in the index up to 567.

From 1926 to the latter part of 1929 a moderate decline occurred, but its effect upon the price structure was not great. Subsequent dislocation, however, was extremely serious, as may be observed from the following percentage declines of group prices between August, 1929, and February, 1933: Canadian farm products, 60.7 p.c.; raw and partly manufactured materials, 50.5 p.c.; fully and chiefly manufactured goods, 29.3 p.c.; and the average of all commodities at wholesale, 35.5 p.c. From March, 1933, to July, 1937, the movement of commodity prices was irregularly upward, culminating in a sharp rise dating from June, 1936. The July, 1937, index of 87.5 was 36 p.c. above that for February, 1933, although this increase was partly cancelled by a decline of 2.9 points in the last five months of the year. The following index numbers show the relationship between the average of all commodities and specified commodity groups for December, 1937: all commodities, 100.0; Canadian farm products, 101.8; raw and partly manufactured materials, 97.7; and fully and chiefly manufactured materials, 97.0. This represents material improvement over conditions existing at the nadir of the depression, and points to a substantial restoration of equilibrium between the major price groups.

2.—Weighted General Wholesale Price Index Numbers, by Months, 1928-37.

(1926=100.)

Month.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
January.....	96.9	94.0	95.3	75.9	69.5	63.8	70.7	71.4	72.9	81.9
February.....	96.8	95.0	93.9	75.5	68.9	63.5	72.1	71.8	72.5	82.9
March.....	97.7	95.6	91.8	74.5	69.0	64.3	72.1	71.9	72.4	85.4
April.....	98.3	94.5	91.2	73.9	68.2	65.3	71.3	72.5	72.2	86.2
May.....	97.9	93.4	89.7	72.5	67.4	66.7	71.1	72.2	71.9	85.2
June.....	96.9	93.4	87.7	71.8	66.4	67.5	72.0	71.4	72.3	84.6
July.....	96.0	97.2	85.3	71.3	66.5	70.5	72.0	71.4	74.3	87.6
August.....	95.3	98.4	83.7	70.5	66.7	69.5	72.2	71.7	76.1	85.6
September.....	95.4	97.8	82.1	69.7	65.9	68.9	71.9	72.4	76.4	85.0
October.....	95.2	96.8	81.0	69.9	65.0	67.9	71.3	73.1	77.1	84.7
November.....	94.9	95.7	79.5	70.7	64.7	68.9	71.1	72.7	77.2	83.1
December.....	94.6	96.0	77.7	70.4	64.0	69.0	71.1	72.7	79.6	82.7
Yearly Averages.	96.4	95.6	86.6	72.1	66.7	67.1	71.6	72.1	74.6	84.6

This irregular rise in Canadian price levels which dates from February, 1933, received its first major setback in the last half of 1937. The Bureau's index of wholesale prices for December was 82.7 on the base 1926=100; it compared with a December 1936 figure of 79.6, and indicated a net rise of 3.9 p.c. Year-end indexes alone, however, fail to give a true picture of price movements. The rapid advance which featured the latter half of 1936 continued at an accelerated pace until the final week of March when the Bureau's weekly index reached a peak of 86.9. Coincident with subsequent recession in world commodity markets, Canadian price levels reacted moderately carrying the index to 84.1 for the week ended June 11. Rapid deterioration of the grain crop on the Prairies then stimulated an advance in the Canadian farm products index of more than 12 p.c. in the next 5 weeks, while the general index rose 4 p.c. to 87.7. A second decline commenced in August, and subsequent monthly indexes fell steadily with many wholesale prices ending the year considerably below opening figures.

Movements of indexes for the various component materials showed less variation in 1937 than in 1936. In the preceding year the range of dispersion was marked by vegetable products which advanced 25.2 p.c. and by a rise of 0.6 p.c. for non-metallic mineral products. In 1937 the range was from +13.9 p.c. to -7.1 p.c., and the actual percentage changes were as follows: vegetable products +1.5, animal products +5.8, textiles -2.7, wood products +8.5, iron and its products +13.9, non-ferrous metals -7.1, non-metallic minerals +1.4, and chemicals +2.0.

3.—Annual Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), by Groups (Chief Component Material Classification), 1913-37, with Monthly Figures for 1936-37.

NOTE.—Monthly figures for 1932 and 1933 will be found at p. 863 of the 1934-35 Year Book, for 1934 at p. 807 of the 1936 Year Book, for 1935 at p. 793 of the 1937 Year Book, and those for certain earlier years in the corresponding table of previous editions.

Year and Month.	Vegetable Products.	Animals and Their Products.	Fibres, Textiles and Textile Products.	Wood, Wood Products and Paper.	Iron and Its Products.	Non-Ferrous Metals and Their Products.	Non-Metallic Minerals and Their Products.	Chemicals and Allied Products.	All Commodities.
Numbers of Commodity Price Series Used.									
1913-25.....	67	50	28	21	26	15	16	13	236
1926-33.....	124	74	60	44	39	15	73	73	502
1934-37.....	135	76	85	49	44	18	83	77	567
Index Numbers.									
1913.....	58.1	70.9	58.2	63.9	68.9	98.4	56.8	63.4	64.0
1914.....	64.8	72.6	56.9	60.3	67.3	94.7	53.7	65.3	65.5
1915.....	75.6	74.0	58.3	56.5	73.9	106.9	52.7	68.1	70.4
1916.....	87.0	85.0	77.6	64.0	104.6	135.1	58.0	78.0	84.3
1917.....	124.5	110.4	114.6	79.8	151.8	143.9	71.6	98.1	114.3
1918.....	127.9	127.1	157.1	89.1	156.7	141.9	82.3	118.7	127.4
1919.....	136.1	140.8	163.8	109.6	139.1	133.5	93.0	117.5	133.9
1920.....	167.0	145.1	176.6	154.4	168.4	135.5	112.2	141.5	155.9
1921.....	103.5	109.6	96.0	129.4	128.0	97.0	116.6	117.0	110.0
1922.....	86.2	96.0	101.7	106.3	104.6	97.3	107.0	105.4	97.3
1923.....	83.7	95.0	116.9	113.0	115.8	95.3	104.4	104.4	98.0
1924.....	89.2	91.8	117.9	105.9	111.0	94.8	104.1	102.5	99.4
1925.....	100.6	100.3	112.5	101.6	104.5	103.9	100.3	99.6	102.6
1926.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927.....	98.3	101.9	93.7	98.5	96.2	91.5	96.5	98.3	97.7
1928.....	93.0	108.1	94.5	98.7	93.2	92.0	92.5	95.3	96.4
1929.....	91.6	109.0	91.3	93.9	93.7	99.2	92.9	95.4	95.6
1930.....	77.7	99.1	81.8	88.7	91.1	80.7	91.3	92.8	86.6
1931.....	56.9	73.9	73.4	79.1	87.4	64.6	86.5	86.7	72.1
1932.....	54.8	59.7	69.7	69.1	86.3	59.0	85.5	83.9	66.7
1933.....	59.3	59.4	69.7	62.8	85.4	64.3	84.4	81.3	67.1
1934.....	66.6	67.2	72.9	65.4	87.0	64.3	86.0	81.2	71.6
1935.....	67.3	70.4	70.2	64.6	87.2	69.1	85.5	79.1	72.1
1936.....	72.6	71.8	69.6	68.5	88.0	70.0	85.5	78.0	74.6
1937.....	88.4	78.4	72.7	76.7	101.8	83.8	86.6	81.4	84.6
1936.									
January.....	67.7	72.9	69.9	67.4	87.2	68.3	85.3	77.3	72.9
February.....	66.4	72.1	69.4	67.8	87.3	68.4	85.9	77.2	72.5
March.....	66.7	70.5	69.6	67.8	87.3	69.2	85.9	77.2	72.4
April.....	66.5	69.9	69.5	68.0	87.4	69.1	85.5	77.4	72.2
May.....	65.7	69.1	69.1	68.2	87.8	68.3	85.4	77.2	71.9
June.....	66.9	69.7	69.1	68.1	87.7	67.7	85.7	77.2	72.3
July.....	73.1	70.5	69.5	68.2	87.8	68.1	85.1	78.3	74.3
August.....	77.5	72.3	69.8	68.6	87.9	69.1	85.2	78.4	76.1
September.....	77.4	73.4	69.6	68.8	88.2	70.2	85.4	78.5	76.4
October.....	79.6	73.4	69.5	69.3	88.2	70.4	85.0	78.7	77.1
November.....	79.1	73.5	69.6	69.4	88.3	74.0	85.0	78.8	77.2
December.....	84.0	73.9	70.9	69.6	91.4	77.8	85.9	79.1	79.6
1937.									
January.....	87.6	75.4	72.1	73.0	92.1	82.5	85.6	79.2	81.9
February.....	88.6	75.2	73.2	74.2	94.1	86.2	86.0	80.0	82.9
March.....	90.6	74.9	73.8	77.3	100.1	97.6	85.5	81.6	85.4
April.....	91.3	77.1	75.2	78.5	102.9	89.6	85.6	82.7	86.2
May.....	88.7	76.8	75.1	78.9	102.8	85.9	86.6	82.2	85.2
June.....	87.0	77.5	74.9	77.8	103.0	84.3	86.8	81.6	84.6
July.....	95.5	78.9	74.4	78.0	103.9	85.9	87.0	81.7	87.6
August.....	87.7	81.0	73.6	77.9	104.5	86.3	87.2	81.8	85.6
September.....	86.5	81.8	71.7	77.2	105.3	83.4	87.4	81.7	85.0
October.....	87.6	81.7	70.8	76.2	105.0	77.4	87.3	81.9	84.7
November.....	84.5	80.7	69.2	75.7	104.1	73.7	87.4	81.3	83.1
December.....	85.2	78.2	69.0	75.5	103.9	72.5	87.2	80.7	82.7

4.—Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Purpose, Yearly Averages, 1911-37, and Individual Months, 1936-37.

NOTE.—Monthly figures for 1932 and 1933 will be found at p. 865 of the 1934-35 Year Book, and for 1934 at p. 808 of the 1936 Year Book, for 1935 at p. 794 of the 1937 Year Book and those for certain earlier years in the corresponding table of earlier editions.

Year and Month.	Consumer Goods.			Producer Goods.					All Commodities.
	All.	Foods, Beverages and Tobacco.	Other.	All.	Producer Equipment.	Producers' Materials.			
						All.	Building and Construction.	Manufacturing.	
Numbers of Commodity Price Series Used.									
1913-25.....	98	74	24	146	15	131	32	99	236
1926-33.....	204	116	88	351	22	329	97	232	502
1934-37.....	236	126	110	402	24	378	111	267	567
Index Numbers.									
1914.....	62.7	65.2	59.7	69.7	52.0	72.1	62.9	74.3	65.5
1915.....	65.6	68.6	61.8	77.0	53.1	80.2	60.5	84.8	70.4
1916.....	74.7	81.7	65.8	88.1	55.7	92.5	69.6	97.9	84.3
1917.....	95.4	109.4	77.6	119.6	69.6	126.3	87.6	135.5	114.3
1918.....	107.0	119.4	91.4	131.5	80.4	138.3	100.9	147.2	127.4
1919.....	118.7	128.2	106.7	139.0	90.7	145.5	117.3	152.2	133.9
1920.....	140.0	151.0	126.3	163.1	108.6	170.4	144.0	176.6	155.9
1921.....	108.0	105.4	111.4	112.8	113.8	112.6	122.8	110.2	110.0
1922.....	95.1	90.2	101.4	99.1	104.1	98.2	108.7	95.8	97.3
1923.....	93.7	91.2	97.0	97.8	102.5	97.1	111.9	93.7	98.0
1924.....	93.2	90.4	96.8	99.5	102.7	99.0	106.6	97.5	99.4
1925.....	97.2	97.7	96.5	104.9	99.2	105.5	102.9	106.2	102.6
1926.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927.....	95.7	99.4	93.3	98.5	101.1	98.2	96.1	98.6	97.7
1928.....	95.6	99.6	92.9	96.7	93.7	97.0	97.4	96.9	96.4
1929.....	94.7	100.0	91.1	96.1	94.6	96.3	99.0	95.9	95.6
1930.....	89.3	93.1	86.8	82.5	92.9	81.7	90.8	79.7	86.6
1931.....	76.2	70.4	80.0	67.1	90.0	64.6	81.9	61.7	72.1
1932.....	71.3	61.5	77.8	62.4	88.7	59.5	77.2	56.5	66.7
1933.....	71.1	63.8	76.0	63.1	86.0	60.5	78.3	57.5	67.1
1934.....	74.1	69.7	77.0	67.8	88.9	65.5	82.5	62.6	71.6
1935.....	73.6	70.4	75.7	69.5	89.8	67.2	81.2	64.8	72.1
1936.....	74.7	73.4	75.5	72.4	90.0	70.4	85.3	67.9	74.6
1937.....	79.5	81.2	78.4	86.1	93.8	85.2	94.4	83.6	84.6
1936.									
January.....	74.2	72.4	75.4	69.8	90.0	67.5	83.6	64.8	72.9
February.....	73.9	71.3	75.7	69.3	90.2	67.0	84.2	64.1	72.5
March.....	73.8	70.8	75.8	69.3	90.2	67.0	84.2	64.1	72.4
April.....	73.3	70.3	75.4	69.1	90.2	66.7	84.6	63.7	72.2
May.....	73.2	70.1	75.3	67.9	89.9	65.5	85.0	62.2	71.9
June.....	73.7	71.2	75.4	68.5	90.0	66.1	84.8	62.9	72.3
July.....	74.3	73.3	75.0	72.1	89.7	70.1	85.2	67.5	74.3
August.....	75.5	75.6	75.4	74.6	89.7	72.9	85.6	70.8	76.1
September.....	75.5	75.6	75.5	75.0	89.6	73.4	85.8	71.3	76.4
October.....	75.8	76.4	75.4	76.3	89.5	74.8	86.4	72.8	77.1
November.....	76.0	76.2	75.8	76.3	89.5	74.8	86.6	72.8	77.2
December.....	76.9	77.5	76.5	80.4	91.8	79.1	87.8	77.6	79.6
1937.									
January.....	78.0	79.4	77.1	83.5	92.1	82.5	90.0	81.2	81.9
February.....	78.6	79.7	77.8	84.7	92.3	83.8	91.8	82.5	82.9
March.....	78.3	79.4	77.5	88.7	92.3	88.3	97.3	86.8	85.4
April.....	79.1	80.7	78.1	89.2	92.4	88.8	98.2	87.2	86.2
May.....	79.2	80.0	78.7	87.3	94.1	86.5	98.0	84.6	85.2
June.....	79.5	80.3	79.0	85.8	94.3	84.9	96.4	83.0	84.6
July.....	81.2	84.4	79.1	90.3	94.3	89.8	95.7	88.8	87.6
August.....	80.6	82.8	79.2	86.8	94.6	85.9	95.4	84.3	85.6
September.....	80.5	82.1	79.1	85.9	94.5	84.9	94.3	83.3	85.0
October.....	80.6	83.0	79.0	84.8	94.5	83.7	92.6	82.2	84.7
November.....	79.7	81.6	78.5	82.4	94.5	81.0	91.8	79.2	83.1
December.....	79.1	80.2	78.3	82.6	94.3	81.3	91.7	79.5	82.7

5.—Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Origin and Degree of Manufacture, by Yearly Averages, 1931-37.

NOTE.—Figures for the years 1918, 1919 and 1921-29 will be found at p. 866 of the 1934-35 Year Book, and those for 1930 at p. 795 of the 1937 Year Book.

Item.	Numbers of Commodities.			1931.	1932.	1933.	1934.	1935.	1936.	1937.
	1913-25.	1926-33.	1934-37.							
Aggregate combined indexes, raw and partly manufactured.	107	232	245	61.9	55.0	56.6	63.5	66.0	70.8	84.3
Aggregate combined indexes, fully and chiefly manufactured	129	276	322	74.8	69.8	70.2	73.4	72.8	73.6	80.5
Articles of Farm Origin—										
1. Field (grains, etc.)—										
(a) Raw and partly manufactured.	46	98	98	44.0	41.0	45.3	54.2	56.2	63.8	82.8
(b) Fully and chiefly manufactured.	41	69	91	69.5	67.1	71.2	73.9	72.8	73.8	82.4
(c) Combined indexes.	87	167	186	57.7	55.1	59.3	64.8	65.1	69.2	83.1
2. Animal—										
(a) Raw and partly manufactured.	25	41	46	76.8	59.9	59.0	66.0	71.6	73.6	82.7
(b) Fully and chiefly manufactured.	28	49	59	71.6	61.1	62.5	69.8	69.9	71.4	76.2
(c) Combined indexes.	53	90	105	73.9	60.6	61.0	68.2	70.6	72.4	79.0
Canadian Farm Products—										
1. Field (grains, etc.)	20	46	52	43.6	41.1	45.8	53.8	57.3	65.8	88.3
2. Animal.	16	13	18	77.6	60.7	59.7	67.7	74.0	75.3	85.0
3. Combined indexes.	36	59	70	56.3	48.4	51.0	59.0	63.5	69.4	87.1
Articles of Marine Origin—										
(a) Raw and partly manufactured.	2	5	5	70.3	56.2	56.2	60.3	61.8	67.1	72.1
(b) Fully and chiefly manufactured.	6	11	11	77.6	66.6	65.4	75.1	72.0	70.1	71.7
(c) Combined indexes.	8	16	16	75.6	63.8	62.9	71.1	69.2	69.3	71.8
Articles of Forest Origin—										
(a) Raw and partly manufactured.	16	31	37	79.4	69.6	69.7	76.3	74.5	80.8	94.0
(b) Fully and chiefly manufactured.	5	21	20	78.7	68.9	57.2	56.1	56.1	57.5	61.1
(c) Combined indexes.	21	52	57	79.0	69.2	63.0	65.5	64.7	68.4	76.4
Articles of Mineral Origin—										
(a) Raw and partly manufactured.	18	57	62	77.9	77.0	75.6	77.5	79.6	79.9	85.3
(b) Fully and chiefly manufactured.	49	126	141	85.1	84.9	84.6	86.0	85.3	85.2	91.6
(c) Combined indexes.	67	183	203	81.9	81.4	80.6	82.2	82.8	82.8	88.8

¹ Domestic and foreign.

6.—Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Origin and Degree of Manufacture, by Months, 1933-37.

NOTE.—Comparable figures for the years 1926-29 will be found at pp. 807-809 of the 1933 Year Book, and for the years 1930-32 at pp. 867-869 of the 1934-35 Year Book.

Origin and Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Totals, Raw and Partly Manufactured—												
1933.....	51.2	50.6	52.1	53.0	56.0	57.6	62.9	60.9	59.9	57.5	59.3	58.9
1934.....	61.1	62.8	62.3	61.5	62.3	64.6	64.7	65.3	64.8	64.5	64.3	64.3
1935.....	64.7	64.9	65.2	66.4	66.3	65.0	64.9	65.0	67.3	67.9	67.2	67.2
1936.....	68.0	67.5	67.3	66.8	66.2	66.6	69.7	73.0	73.9	75.2	75.8	79.3
1937.....	82.5	83.8	86.8	87.6	85.8	83.2	88.3	83.6	83.7	83.5	81.1	80.8
Totals, Fully and Chiefly Manufactured—												
1933.....	67.2	66.8	67.8	69.6	70.4	70.2	72.4	71.7	71.5	71.2	71.7	72.0
1934.....	73.1	74.6	75.1	74.0	73.0	73.0	73.1	73.4	73.5	72.8	72.4	72.5
1935.....	72.6	73.4	73.3	73.3	72.3	71.5	71.8	72.3	72.4	73.3	72.9	72.9
1936.....	72.7	72.2	72.1	72.3	71.7	71.9	73.3	74.8	74.9	75.2	75.4	77.3
1937.....	78.5	78.7	79.6	80.6	80.1	80.3	82.3	81.9	81.3	81.4	80.7	80.3

6.—Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Origin and Degree of Manufacture, by Months, 1933-37—
continued.

Origin and Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
I. Articles of Farm Origin (domestic and foreign)—												
A. Field (grains, fruits, cotton, etc.)—												
Raw and Partly Manufactured—												
1933.....	35.1	35.8	38.3	40.7	46.5	48.8	58.6	53.5	49.4	44.4	46.3	45.3
1934.....	49.0	50.6	51.0	50.2	52.1	56.4	58.1	60.2	58.4	55.2	55.1	55.2
1935.....	55.4	55.4	55.7	58.4	57.0	54.9	55.2	54.9	57.3	57.9	56.4	56.2
1936.....	57.2	55.9	56.3	56.2	55.0	57.1	63.8	70.3	70.4	72.1	71.8	78.0
1937.....	82.7	83.9	87.4	88.1	83.8	81.1	91.0	80.4	79.8	80.8	76.4	77.6
Fully and Chiefly Manufactured—												
1933.....	64.6	64.2	64.7	70.2	73.2	72.5	77.3	75.0	74.1	72.7	73.3	73.2
1934.....	74.5	75.4	75.5	74.1	73.6	73.0	73.6	74.3	73.8	73.1	73.0	73.3
1935.....	73.4	73.7	73.7	74.5	73.7	72.5	72.0	72.1	71.7	72.6	71.8	71.8
1936.....	72.0	71.3	71.4	71.1	70.5	70.3	73.2	75.6	75.5	77.5	77.6	80.7
1937.....	81.7	82.0	83.2	84.4	83.8	83.3	87.3	84.6	83.0	83.3	82.3	82.5
Total—												
1933.....	51.0	51.1	52.5	56.6	60.9	61.6	68.7	65.1	62.7	59.6	60.8	60.3
1934.....	62.7	64.0	64.2	63.1	63.7	65.3	66.4	67.8	66.7	64.8	64.7	64.9
1935.....	65.1	65.3	65.4	67.1	66.0	64.4	64.2	64.2	65.1	65.8	64.7	64.6
1936.....	65.2	64.2	64.4	64.2	63.3	64.2	68.9	73.1	73.1	75.0	74.9	79.5
1937.....	82.2	82.9	85.1	86.1	83.8	82.3	89.0	82.7	81.5	82.1	79.6	80.2
B. Animal—												
Raw and Partly Manufactured—												
1933.....	57.9	55.0	55.9	56.2	57.7	57.4	58.5	59.9	62.2	62.0	65.3	65.1
1934.....	66.1	69.6	67.1	65.8	65.1	65.8	63.3	61.7	63.4	67.9	67.9	67.8
1935.....	68.9	69.6	70.4	70.0	71.8	70.6	69.7	70.1	73.3	74.4	74.3	74.6
1936.....	75.8	75.8	73.9	72.4	72.6	70.3	70.1	70.5	72.9	74.3	76.8	78.0
1937.....	79.5	80.5	81.4	83.8	84.4	80.8	81.8	82.7	85.2	84.5	84.5	81.6
Fully and Chiefly Manufactured—												
1933.....	59.2	58.9	62.3	63.8	61.9	61.9	63.0	63.3	63.0	63.1	64.0	65.4
1934.....	67.6	72.0	73.9	71.7	68.8	69.6	69.3	69.5	70.7	68.9	67.7	67.6
1935.....	67.6	70.1	69.7	69.1	67.9	66.9	67.7	69.7	71.1	73.4	72.7	72.4
1936.....	71.5	70.0	69.5	70.3	68.9	69.9	71.1	73.1	73.9	72.3	72.6	73.5
1937.....	75.2	74.8	73.8	75.0	73.7	74.8	76.3	78.6	78.6	79.1	77.7	76.1
Total—												
1933.....	58.6	57.2	59.5	60.5	60.1	59.9	61.0	61.8	62.7	62.6	64.6	65.3
1934.....	66.9	71.0	71.0	69.1	67.2	68.0	66.7	66.1	67.5	68.5	67.8	67.7
1935.....	68.2	69.9	70.0	69.5	69.6	68.5	68.6	69.9	72.1	73.8	73.4	73.4
1936.....	73.4	72.5	71.4	71.2	70.5	70.1	70.7	72.0	73.5	73.2	74.4	75.5
1937.....	77.1	77.3	77.1	78.8	78.3	77.4	78.7	80.4	81.5	81.4	80.6	78.5
C. Canadian Farm Products—												
Field (grains, etc.)—												
1933.....	34.8	35.8	37.8	40.7	46.9	49.4	60.8	55.1	49.5	44.1	46.7	45.3
1934.....	48.0	49.4	49.8	48.8	51.1	55.7	57.7	60.7	59.0	55.3	55.7	56.1
1935.....	55.8	55.8	56.4	59.8	58.0	55.1	55.2	56.0	59.1	59.4	58.0	58.1
1936.....	59.0	58.9	59.2	59.8	59.9	60.8	63.2	74.1	74.2	76.4	75.6	83.4
1937.....	88.3	89.6	93.4	94.4	89.0	85.1	97.7	84.6	84.8	86.3	81.8	83.9
Animal—												
1933.....	58.3	54.7	56.1	56.3	58.3	57.7	58.9	60.6	63.2	63.0	67.7	67.4
1934.....	68.4	72.2	68.8	67.4	66.8	66.0	63.7	62.9	65.0	70.3	70.4	70.8
1935.....	71.0	72.5	73.3	72.9	74.4	72.0	71.1	72.4	75.5	76.7	77.1	77.9
1936.....	77.5	77.8	76.0	73.8	73.0	70.4	71.6	71.9	74.7	76.2	79.5	80.8
1937.....	82.1	82.6	84.2	86.3	85.7	81.4	83.9	85.5	88.8	86.9	87.4	84.6
Total—												
1933.....	43.6	42.9	44.6	46.5	51.2	52.5	60.1	57.2	54.6	51.2	54.6	53.6
1934.....	55.6	57.9	56.9	55.8	57.0	59.6	59.9	61.5	61.2	60.9	61.2	61.6
1935.....	61.5	62.0	62.7	64.7	64.1	61.4	61.1	62.1	65.2	65.9	65.1	65.5
1936.....	65.9	66.0	65.5	65.0	64.8	64.4	66.3	73.3	74.4	76.3	77.1	82.4
1937.....	86.0	87.0	90.0	91.4	87.8	83.7	92.5	84.9	86.3	86.5	83.9	84.2
II. Articles of Marine Origin—												
Raw and Partly Manufactured—												
1933.....	54.5	44.6	49.6	46.6	48.1	54.8	56.5	50.2	63.3	67.5	71.0	58.9
1934.....	59.8	60.4	58.7	56.6	56.6	58.3	53.4	60.6	69.0	74.6	65.9	53.8
1935.....	63.2	61.9	61.7	58.7	54.1	61.4	54.6	61.1	68.6	69.4	64.4	61.9
1936.....	61.0	63.7	68.5	64.0	56.0	62.9	61.6	68.9	73.6	79.6	75.2	69.5
1937.....	68.7	69.1	57.2	60.9	62.1	70.5	68.5	83.0	84.7	85.6	82.1	72.8

6.—Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Origin and Degree of Manufacture, by Months, 1933-37—concluded.

Origin and Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
II. Articles of Marine Origin—concluded.												
Fully and Chiefly Manufactured—												
1933.....	60.8	61.2	61.8	63.0	62.7	62.3	63.6	67.7	67.7	68.9	69.0	69.7
1934.....	71.9	72.6	72.2	72.7	72.7	73.2	74.2	74.5	77.7	78.1	77.7	76.7
1935.....	75.5	75.4	75.5	73.6	71.4	72.0	72.5	69.9	68.8	68.6	70.7	70.3
1936.....	69.4	70.0	69.6	69.3	68.7	69.7	70.6	72.0	71.2	70.5	69.9	69.6
1937.....	69.3	69.5	69.7	72.1	71.3	72.2	72.4	70.9	73.4	72.6	73.7	73.8
Total—												
1933.....	59.1	56.7	58.5	58.6	58.7	60.3	61.7	65.4	66.5	68.5	69.5	66.8
1934.....	68.6	69.3	68.5	68.3	68.3	69.2	68.6	70.7	75.3	77.1	74.5	70.5
1935.....	72.2	71.7	71.8	69.6	66.7	69.1	67.7	67.5	68.7	68.8	69.0	68.0
1936.....	67.1	68.3	69.3	67.9	65.3	67.9	68.2	71.2	71.8	73.0	71.3	69.6
1937.....	69.1	69.4	66.3	69.1	68.8	71.7	71.3	74.2	76.4	76.1	76.0	73.5
III. Articles of Forest Origin—												
Raw and Partly Manufactured—												
1933.....	66.0	65.2	65.2	64.4	64.8	69.7	71.5	72.8	74.0	74.7	74.4	74.4
1934.....	75.7	76.0	76.2	76.4	76.8	77.9	77.2	76.5	76.3	76.1	75.2	74.5
1935.....	74.7	74.9	74.2	73.2	73.2	73.1	74.0	73.8	75.5	74.8	75.4	76.8
1936.....	78.7	79.5	79.4	79.8	80.3	80.1	80.7	81.2	81.6	82.8	82.9	83.3
1937.....	86.8	89.3	95.8	98.0	98.5	96.1	96.6	96.3	94.9	92.8	91.7	91.3
Fully and Chiefly Manufactured—												
1933.....	61.8	61.6	61.3	55.3	55.2	55.1	55.2	55.3	55.3	56.0	56.1	56.2
1934.....	56.2	56.2	56.2	56.3	56.4	56.4	56.0	56.0	55.9	55.9	55.9	55.9
1935.....	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.1	56.5	56.5	56.5
1936.....	57.5	57.6	57.5	57.6	57.5	57.4	57.4	57.4	57.3	57.4	57.4	57.5
1937.....	60.7	60.7	60.7	60.9	61.1	61.2	61.2	61.2	61.3	61.2	61.2	61.3
Total—												
1933.....	63.8	63.3	63.1	59.5	59.7	61.9	62.8	63.5	64.0	64.7	64.6	64.7
1934.....	65.3	65.4	65.5	65.7	65.9	66.4	65.9	65.6	65.4	65.3	64.9	64.6
1935.....	64.7	64.8	64.5	64.0	64.0	64.0	64.4	64.3	65.1	65.0	65.3	66.0
1936.....	67.4	67.8	67.7	67.9	68.1	68.0	68.3	68.5	68.6	69.2	69.3	69.5
1937.....	72.9	74.0	77.1	78.2	78.5	77.5	77.7	77.6	77.0	75.9	75.4	75.3
IV. Articles of Mineral Origin—												
Raw and Partly Manufactured—												
1933.....	75.8	75.6	75.9	74.9	74.1	74.4	75.7	75.0	76.5	75.9	76.2	77.3
1934.....	77.9	78.0	77.9	77.1	77.3	77.3	77.5	77.5	77.1	77.3	77.6	77.8
1935.....	78.0	78.0	78.1	79.2	79.6	79.2	79.2	79.8	80.5	81.5	81.4	80.8
1936.....	79.6	79.9	80.1	79.6	79.0	78.9	78.8	79.2	79.9	80.0	81.1	82.7
1937.....	84.0	85.7	88.8	86.3	86.5	85.4	86.1	86.2	85.7	84.0	82.7	82.3
Fully and Chiefly Manufactured—												
1933.....	84.2	83.3	83.4	83.6	83.7	84.2	84.3	84.7	85.8	86.1	86.1	86.1
1934.....	86.4	86.5	86.5	86.5	86.0	86.0	85.9	85.7	85.6	85.6	85.5	85.6
1935.....	85.8	85.9	86.0	85.6	83.7	83.5	84.9	85.1	84.7	84.5	84.5	84.7
1936.....	84.3	84.8	84.8	85.0	85.0	85.2	85.1	85.2	85.3	84.9	85.1	87.2
1937.....	87.4	88.2	91.0	92.0	91.9	92.2	92.7	93.2	93.3	92.8	92.6	92.2
Total—												
1933.....	80.4	79.9	80.0	79.7	79.4	79.8	80.5	80.4	81.6	81.5	81.7	82.2
1934.....	82.6	82.7	82.7	82.3	82.1	82.1	82.1	82.0	81.8	81.9	82.0	82.1
1935.....	82.3	82.4	82.5	82.7	81.9	81.6	82.4	82.7	82.8	83.2	83.1	83.0
1936.....	82.2	82.6	82.7	82.5	82.3	82.4	82.3	82.5	82.9	82.7	83.3	85.1
1937.....	85.9	87.1	90.0	89.5	89.5	89.2	89.7	90.1	89.9	88.9	88.2	87.8

Section 2.—Retail Prices of Commodities.

Collection of data and calculation of index numbers of retail prices and the cost of living are carried out in co-operation by the Dominion Bureau of Statistics (Department of Trade and Commerce) and the Department of Labour. Resultant series of index numbers are computed from different points of view. The computations of the Labour Department are designed to show changes in the cost of living for workmen in cities. They are constructed from family budgets, principally a weekly family budget of staple foods, fuel, and rent which has been published

monthly in the *Labour Gazette* since 1915 and annually since 1911; in addition, figures are included for clothing and sundry items and further data for fuel, light, and rent. The Labour Department aims, by this method, to have a basis for computation that can be readily applied to the data for any given locality or district at any time, or for any class of labour—for instance, coal miners, who usually do not live in cities. Index numbers of retail prices and costs of living issued by the Bureau are constructed from a more general point of view, having for their object the measurement of the general movement of such prices and costs in the Dominion as a whole, and being so calculated as to make comparisons possible with other general index numbers constructed on similar principles, for example, the index of wholesale prices. Calculated, as they are, on the aggregative principle, *i.e.*, the total consumption of each commodity, the Bureau's index numbers afford an excellent measurement of changes in the average cost of living in the Dominion as distinguished from that of any particular class or section.

In the Bureau's index, 1926 is taken as the base year and is represented by 100 to bring it into conformity with other series of index numbers shown in this chapter. A description of the system of weighting of individual items, sub-groups and groups, and of the method of construction of this index number was given at pp. 812-818 of the 1931 Year Book. The Labour Department uses 1913 as 100 for both cost of living and wages index numbers. As will be seen from Table 7, the general cost of living index moved up from 80.8 in 1936 to 83.1 in 1937, continuing the upward trend apparent after July 1933. Higher prices for foods, rentals, clothing and sundries were chiefly responsible for the advance. Fuel declined from 86.4 to 85.4. The monthly index for living costs fluctuated during 1937 between 81.8 and 84.3. January and December group indexes were as follows: foods, 75.2 and 79.1; fuel, 86.3 and 86.1; rent, 84.9 and 89.0; clothing, 71.6 and 73.3; sundries, 93.0 and 93.9.

7.—Index Numbers of Retail Prices, Rents and Costs of Services (on the 1926 Base), 1913-37.

(1926=100.)

Year.	Food Index.	Fuel Index.	Rent Index.	Clothing Index.	Sundries Index.	Total Index.
1913.....	66.2	65.8	64.1	63.3	66.2	65.4
1914.....	68.9	64.5	62.2	63.9	66.2	66.0
1915.....	69.5	63.2	60.3	69.6	66.9	67.3
1916.....	77.5	64.5	60.9	79.7	70.2	72.5
1917.....	100.0	71.7	65.4	93.7	76.8	85.6
1918.....	114.6	78.9	69.2	109.5	86.1	97.4
1919.....	122.5	86.2	75.6	125.9	95.4	107.2
1920.....	141.1	102.6	86.5	153.2	104.0	124.2
1921.....	107.9	109.2	94.2	124.7	106.0	109.2
1922.....	91.4	104.6	98.1	105.7	106.0	100.0
1923.....	92.1	104.6	100.6	104.4	105.3	100.0
1924.....	90.7	102.0	101.3	101.9	103.3	98.0
1925.....	94.7	100.0	101.3	101.9	101.3	99.3
1926.....	100.0	100.0	100.0	100.0	100.0	100.0
1927.....	98.0	97.9	98.8	97.5	99.1	98.4
1928.....	98.6	96.9	101.2	97.4	98.8	98.9
1929.....	101.0	96.4	103.3	96.9	99.0	99.9
1930.....	98.6	95.7	105.9	93.9	99.4	99.2
1931.....	77.3	94.2	103.0	82.2	97.4	89.6
1932.....	64.3	91.4	94.7	72.3	94.6	81.4
1933.....	63.7	87.7	85.1	67.1	92.6	77.5
1934.....	69.4	87.7	80.1	69.7	92.1	78.6
1935.....	70.4	86.8	81.3	69.9	92.2	79.1
1936.....	73.4	86.4 ²	83.7	70.5	92.9 ²	80.8 ²
1937 ¹	77.3	85.4	86.9	72.7	93.6	83.1

¹ Subject to revision.

² Revised since the publication of the 1937 Year Book.

8.—Index Numbers of Retail Prices, Rents and Costs of Services, by Months, 1933, 1936, 1937, and January-April, 1938.

(1926=100.)

Year and Month.	Food Index.	Fuel Index.	Rent Index.	Clothing Index. ¹	Sundries Index.	Total Index. ¹
1933.						
January.....	62.8	89.2	90.0	68.4	92.9	78.7
February.....	60.6	89.1	90.0	68.4	92.7	77.9
March.....	60.4	88.7	90.0	66.2	92.5	77.4
April.....	61.3	88.7	90.0	66.2	92.5	77.7
May.....	61.9	88.4	84.0	66.2	92.5	76.6
June.....	62.2	87.7	84.0	65.8	92.4	76.6
July.....	63.2	86.0	84.0	65.8	92.4	76.8
August.....	67.8	86.4	84.0	65.8	92.4	78.2
September.....	65.9	86.3	84.0	67.9	92.7	78.1
October.....	65.4	87.1	80.4	67.9	92.7	77.3
November.....	65.8	87.2	80.4	67.9	92.7	77.4
December.....	66.6	87.3	80.4	68.5	92.8	77.8
1933 Averages.....	63.7	87.7	85.1	67.1	92.6	77.5
1936.						
January.....	73.9	87.2	82.6	69.9	91.9	80.4
February.....	72.9	87.2	82.6	69.9	92.0	80.1
March.....	73.4	87.4	82.6	70.2	92.1	80.4
April.....	71.0	87.3	82.6	70.2	92.1	79.6
May.....	71.3	87.2	83.8	70.2	92.1	80.0
June.....	71.3	85.8	83.8	70.7	92.1	80.0
July.....	72.6	85.8	83.8	70.7	92.1	80.4
August.....	74.7	85.8	83.8	70.7	92.1	81.0
September.....	75.1	86.1	83.8	70.6	92.2	81.1
October.....	74.4	86.3	84.9	70.6	92.1	81.1
November.....	75.0	86.7	84.9	70.6	92.2	81.4
December.....	75.3	86.7	84.9	71.6	92.3	81.7
1936 Averages.....	73.4	86.6	83.7	70.5	92.1	80.6
1937.²						
January.....	75.2	86.3	84.9	71.6	93.0	81.8
February.....	75.6	86.4	84.9	71.6	93.1	81.9
March.....	75.7	86.4	84.9	72.6	93.3	82.2
April.....	76.3	86.4	84.9	72.6	93.3	82.4
May.....	76.6	85.9	87.3	72.6	93.4	82.9
June.....	76.4	84.0	87.3	72.9	93.7	82.9
July.....	77.2	83.8	87.3	72.9	93.7	83.1
August.....	79.1	84.4	87.3	72.9	93.7	83.7
September.....	78.3	84.5	87.3	73.3	93.9	83.6
October.....	78.9	85.3	89.0	73.3	93.9	84.2
November.....	78.8	85.7	89.0	73.3	93.9	84.2
December.....	79.1	86.1	89.0	73.3	93.9	84.3
1937 Averages.....	77.3	85.4	86.9	72.7	93.6	83.1
1938.²						
January.....	78.4	86.2	89.0	73.3	93.9	84.1
February.....	77.9	86.0	89.0	73.3	93.9	83.9
March.....	78.6	86.3	89.0	73.7	93.9	84.2
April.....	78.8	86.2	89.0	73.7	93.9	84.3

¹ Revisions in the method of computing the clothing index are responsible for minor changes in the clothing group index, and in the total index.

² Subject to revision.

Table 9 shows the average prices of items included in the family budget in 1920, 1926, and in each of the years from 1929-37. These prices are weighted by the quantities used by the Department of Labour in computing a weekly family budget each month. Table 10 gives the group indexes by provinces. An examination of the tables reveals the course of the budget, consisting of food, fuel and lighting, and rent, over the period shown.

9.—Prices of a Family Budget of Staple Foods, Fuel and Lighting, and Rent, for Sixty Cities in Canada, 1920, 1926, and 1929-37.

Item.	Unit.	1920.	1926.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Staples Foods—												
Beef, sirloin steak...	1 lb.	0-389	0-294	0-363	0-356	0-286	0-245	0-210	0-214	0-231	0-231	0-262
Beef, chuck roast...	1 "	0-251	0-160	0-227	0-221	0-158	0-129	0-112	0-115	0-126	0-125	0-142
Veal, roast.....	1 "	0-274	0-193	0-245	0-239	0-183	0-138	0-119	0-121	0-129	0-137	0-145
Mutton, roast.....	1 "	0-354	0-298	0-309	0-302	0-253	0-209	0-188	0-200	0-209	0-218	0-228
Pork, fresh, roast...	1 "	0-397	0-302	0-300	0-298	0-223	0-152	0-151	0-201	0-212	0-214	0-222
Pork, salt mess....	1 "	0-362	0-278	0-273	0-271	0-226	0-155	0-148	0-184	0-198	0-201	0-203
Bacon, breakfast...	1 "	0-559	0-431	0-393	0-399	0-301	0-184	0-198	0-304	0-311	0-295	0-301
Lard, pure leaf....	1 "	0-380	0-246	0-219	0-212	0-157	0-121	0-126	0-135	0-161	0-161	0-168
Eggs, fresh.....	1 doz.	0-709	0-466	0-475	0-457	0-337	0-294	0-281	0-319	0-312	0-338	0-334
Eggs, storage.....	1 "	0-608	0-398	0-403	0-394	0-271	0-228	0-217	0-259	0-258	0-279	0-274
Milk.....	1 qt.	0-151	0-118	0-123	0-123	0-111	0-098	0-093	0-098	0-102	0-103	0-108
Butter, dairy.....	1 lb.	0-631	0-406	0-428	0-368	0-272	0-216	0-220	0-236	0-237	0-248	0-271
Butter, creamery...	1 "	0-696	0-448	0-470	0-405	0-300	0-253	0-255	0-270	0-273	0-283	0-309
Cheese, old.....	1 "	0-406	0-318	0-334	0-318	0-251	0-206	0-196	0-199	0-199	0-211	0-228
Cheese, new.....	1 "	0-383	0-318	0-334	0-318	0-251	0-206	0-196	0-199	0-199	0-211	0-228
Bread, plain white..	1 "	0-093	0-076	0-078	0-075	0-062	0-059	0-057	0-059	0-059	0-063	0-070
Flour, family.....	1 "	0-079	0-053	0-051	0-047	0-033	0-030	0-029	0-032	0-034	0-036	0-045
Rolled oats.....	1 "	0-084	0-058	0-064	0-061	0-050	0-047	0-048	0-051	0-052	0-052	0-058
Rice, good medium..	1 "	0-164	0-110	0-104	0-101	0-092	0-085	0-080	0-081	0-078	0-079	0-081
Beans, hand picked..	1 "	0-117	0-079	0-115	0-094	0-061	0-043	0-041	0-046	0-052	0-055	0-072
Apples evaporated..	1 "	0-286	0-200	0-213	0-206	0-178	0-160	0-150	0-152	0-155	0-160	0-160
Prunes, medium....	1 "	0-270	0-158	0-141	0-155	0-121	0-111	0-115	0-127	0-122	0-111	0-117
Sugar, granulated...	1 "	0-197	0-079	0-073	0-068	0-062	0-059	0-073	0-072	0-064	0-061	0-064
Sugar, yellow.....	1 "	0-185	0-075	0-069	0-065	0-060	0-057	0-071	0-070	0-062	0-060	0-063
Tea, black.....	1 "	0-644	0-719	0-704	0-628	0-552	0-472	0-424	0-504	0-524	0-520	0-536
Tea, green.....	1 "	0-672	0-719	0-704	0-628	0-552	0-472	0-424	0-504	0-524	0-520	0-536
Coffee.....	1 "	0-608	0-612	0-604	0-572	0-492	0-428	0-400	0-392	0-376	0-360	0-356
Potatoes.....	1 pk.	0-658	0-436	0-291	0-355	0-172	0-130	0-189	0-183	0-152	0-265	0-242
Vinegar, white wine.	1 pt.	0-080	0-080	0-080	0-080	0-080	0-072	0-072	0-072	0-072	0-072	0-072
All Foods, Weekly Budget¹.....												
		15-99	11-21	11-34	10-96	8-49	7-10	7-03	7-56	7-70	8-09	8-62
Starch, laundry.....	1 lb.	0-144	0-124	0-123	0-123	0-120	0-117	0-114	0-114	0-114	0-117	0-117
Fuel and Lighting—												
Coal, anthracite....	1 ton	17-04	17-392	16-192	16-112	16-064	15-616	15-056	15-056	14-704	14-688	14-384
Coal, bituminous....	1 "	12-38	10-311	10-080	10-064	9-840	9-584	9-296	9-280	9-360	9-360	9-360
Wood, hard, best...	1 cord	13-09	12-195	12-208	12-176	11-696	10-912	9-808	9-632	9-792	9-568	9-536
Wood, soft.....	1 "	10-14	8-947	8-800	8-672	8-560	7-984	7-408	7-328	7-296	7-216	7-216
Coal oil.....	1 gal.	0-365	0-308	0-311	0-309	0-291	0-274	0-271	0-275	0-272	0-270	0-268
Rent—												
Rent.....	1 month	24-80	27-43	27-92	28-16	27-80	25-76	23-04	22-16	23-32	22-76	23-40
Grand Totals, Weekly Budget¹.....												
		25-91	21-47	21-61	21-29	18-66	16-60	15-70	16-02	16-16	16-65	17-31

¹ Totals for "All Foods" and "Grand Totals" are based upon the estimated weekly family consumption of the items specified.

10.—Index Numbers of a Family Budget of Staple Foods, Fuel and Lighting, and Rent in Canada, by Provinces, 1928-37.

(Dominion average for 1913=100.)

Province.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
STAPLE FOODS.										
Prince Edward Island.....	134.3	139.1	140.4	115.4	95.4	94.9	100.0	100.2	105.4	113.1
Nova Scotia.....	149.3	153.5	151.6	121.7	102.9	99.5	106.6	107.0	110.5	116.9
New Brunswick.....	149.0	151.4	149.1	119.9	102.1	99.9	105.6	107.5	112.7	118.2
Quebec.....	139.2	142.8	138.8	107.4	89.4	87.9	95.4	96.4	102.8	107.8
Ontario.....	151.0	153.8	148.7	114.5	95.7	95.5	104.1	105.4	111.1	117.5
Manitoba.....	145.6	151.2	144.5	108.8	93.0	92.1	97.0	101.7	107.5	115.7
Saskatchewan.....	152.3	158.3	149.1	110.4	93.4	92.4	99.5	101.4	104.7	114.9
Alberta.....	151.1	158.9	150.9	111.8	93.0	92.1	99.4	102.5	106.0	116.4
British Columbia.....	164.6	170.4	164.5	129.6	106.9	106.0	112.7	115.9	121.3	131.5
FUEL AND LIGHTING.										
Prince Edward Island.....	152.4	154.5	153.9	152.9	150.8	138.7	142.9	139.8	137.2	139.3
Nova Scotia.....	152.4	151.8	150.3	149.2	139.3	131.4	133.0	130.4	129.8	127.7
New Brunswick.....	161.8	160.2	160.7	156.0	147.6	140.3	139.3	139.8	137.2	135.6
Quebec.....	174.9	174.9	173.3	167.0	157.1	149.2	149.7	148.7	147.1	147.6
Ontario.....	177.0	177.0	175.9	173.3	164.9	156.5	155.5	155.5	154.5	151.8
Manitoba.....	184.8	189.5	190.1	181.7	159.2	153.9	157.6	158.1	156.5	155.0
Saskatchewan.....	183.3	181.2	174.9	160.7	112.6	102.6	102.1	103.7	101.6	102.1
Alberta.....	108.4	100.5	100.5	97.4	94.2	90.6	87.4	85.9	85.3	85.3
British Columbia.....	147.1	147.6	147.6	146.1	137.2	128.3	124.6	123.6	125.1	125.1
RENT.										
Prince Edward Island.....	118.5	122.3	123.8	123.8	123.8	123.2	121.1	115.8	113.3	114.5
Nova Scotia.....	117.9	117.9	121.1	126.9	126.9	117.5	111.8	112.6	113.3	112.6
New Brunswick.....	142.1	142.1	139.4	135.6	132.4	124.2	120.2	117.5	117.5	120.4
Quebec.....	122.7	123.2	125.9	124.4	118.1	110.1	105.3	104.4	105.3	108.2
Ontario.....	153.1	154.3	155.8	153.3	139.6	123.2	120.4	122.9	126.7	131.8
Manitoba.....	184.2	184.2	184.2	176.6	153.5	131.8	125.1	123.4	122.7	127.4
Saskatchewan.....	184.2	184.2	185.7	176.8	156.0	133.1	129.3	123.8	125.7	129.2
Alberta.....	151.8	157.9	161.7	160.4	143.6	125.5	116.6	116.8	117.9	120.2
British Columbia.....	138.1	139.8	140.8	140.2	131.4	118.3	110.3	112.0	116.2	118.5
GRAND TOTALS.										
Prince Edward Island.....	131.2	135.3	136.3	123.1	112.4	110.2	112.8	110.7	112.5	117.2
Nova Scotia.....	138.9	141.0	140.8	127.0	115.8	109.7	111.7	111.9	114.1	117.0
New Brunswick.....	148.2	149.2	147.1	129.9	118.4	113.4	114.9	115.1	117.7	121.4
Quebec.....	138.3	140.3	138.8	121.1	108.2	103.6	106.0	106.0	109.7	113.4
Ontario.....	155.0	156.9	154.5	135.4	119.8	113.0	116.4	117.9	122.4	127.0
Manitoba.....	163.8	167.4	163.9	141.5	122.3	113.8	114.6	116.5	119.6	125.1
Saskatchewan.....	167.2	170.0	164.7	139.5	117.0	107.4	109.7	109.1	111.5	118.2
Alberta.....	145.3	150.4	147.4	126.1	110.1	103.0	103.4	104.9	107.4	113.5
British Columbia.....	153.0	156.7	153.9	135.2	119.1	113.0	113.3	115.4	120.2	126.3

Section 3.—Index Numbers of Security Prices.

Security prices have long been utilized in statistical measurements related to economic phenomena. They are extremely sensitive to changing business conditions, although this valuable characteristic is sometimes overshadowed by the fact

that their movements may be greatly influenced by speculative interest very remotely associated with underlying economic conditions. Thus in 1928 and 1929, common stock prices advanced far beyond levels indicated by business profits and prospects.

The behaviour of Canadian common stock prices has been quite different from that of commodity prices since pre-war years. There was no advance in security markets during the Great War paralleling the pronounced inflation in commodity values. Between 1926 and 1929, however, when commodity prices were declining gradually, common stocks more than doubled in price. Both sets of prices recorded a sharp drop between 1929 and 1933, and both have shown recovery subsequently. This has been much more pronounced in the case of security prices.

Investors Index Numbers of Common Stocks.—Canadian security prices of all types suffered net losses during 1937. Amounts varied, ranging from an average of approximately 20 p.c. for common stocks down to 2 p.c. for Dominion long-term bonds. Year-end comparisons fail to reveal the extent of price reactions in 1937 which came between February and October, following a period of rapid appreciation dating from the summer of 1935. This recession wiped out gains of 1936 and part of those recorded for 1935, before signs of hesitant recovery appeared in November and December. Mining stocks showed considerable improvement at this time, although industrials and utilities made little progress.

Industrial common stocks reached a major turning point on Mar. 10 and thereafter moved definitely downward. This marked the termination of an irregular advance dating from February, 1933. Intervening reactions were all of a minor character and bore little semblance to the drastic decline of the past year. The first phase of this movement ended on Apr. 29 in a heavy wave of liquidation. The industrial index for that day was 205.0 as compared with the Mar. 10 peak of 247.3 and the opening level of 220.0 on Jan. 4. There followed a period of erratic recovery terminating on Aug. 14 with the index at 226.0. Most of the improvement occurred in July. The second phase of decline was much more drastic although it gathered momentum rather gradually. Termination came on Oct. 19 after a week which witnessed the sharpest break in prices since October, 1929, and after the index had reached 154.9. Subsequent recovery was equally pronounced at first, but markets soon settled down into a series of cyclical fluctuations, usually of about two weeks duration, and little headway resulted. The industrial price index for Dec. 31 was 165.6. The 1937 December average of 167.7 was 21.2 p.c. below the corresponding average for 1936. Percentage declines between monthly average levels for December, 1936 and 1937, for various industrial stock groups were as follows: machinery 26, pulp and paper 38, milling 26, oils 13, textiles 9, foods 15, beverages 21, building materials 28, industrial mines 29.

Utility stock prices followed the general market swings of the industrial section, but fluctuations were less pronounced. Opening at 66.1 on Jan. 4, a price index of 19 utility common stocks moved gradually upward to the year's high of 75.3 on Feb. 20, three weeks before industrials reached their crest. The subsequent decline halted at an intermediate low of 59.2 on Apr. 28. The second low in utilities of 48.0 came on Oct. 19 after an intervening rise to 67.3 on Aug. 9. Subsequent rallies showed little underlying strength and during the last two months the utility average twice dropped under the lowest October levels. It was 47.8 on Dec. 31. Sharp declines in the transportation section, and last quarter weakness in the power issues were responsible for the losses registered by the utility group.

11.—Investors Index Numbers of Common Stocks (on the 1926 Base), by Months, 1937.

NOTE.—Figures for 1933 and 1934 were published at pp. 874 and 875 of the 1934-35 Year Book, for 1935 at p. 816 of the 1936 Year Book and for 1936 at p. 803 of the 1937 Year Book; those for earlier years may be found in the corresponding table of earlier editions.

Month.	Grand Total.	Types of Stocks.										
		Banks, Total.	Industrials.									In- dus- trial Mines.
			Indus- trials, Total.	Mach- inery and Equip- ment.	Pulp and Paper.	Mill- ing.	Oils.	Tex- tiles and Cloth- ing.	Food and Allied Pro- ducts.	Bever- ages.	Build- ing Ma- terials.	
January.....	137.4	94.4	222.0	156.3	37.2	119.6	229.6	77.3	184.2	141.0	197.0	549.3
February....	142.4	96.7	228.8	163.4	36.7	120.7	235.2	78.5	188.2	139.3	203.5	586.7
March.....	147.2	95.9	241.7	168.3	40.2	127.0	247.7	80.2	190.0	141.8	213.4	618.2
April.....	136.2	94.0	224.1	157.5	47.1	117.4	230.4	79.9	182.4	133.4	204.8	538.9
May.....	132.2	92.7	216.4	151.3	38.5	109.4	229.6	77.5	178.5	128.4	188.4	525.5
June.....	129.4	92.3	210.1	148.1	38.2	103.7	220.2	77.7	177.7	131.0	179.6	510.8
July.....	133.0	90.2	217.8	148.0	40.5	102.0	222.6	79.7	182.1	136.1	188.7	547.4
August.....	135.2	89.9	221.6	151.2	40.4	95.2	223.6	79.5	182.0	136.9	192.7	564.2
September..	118.9	84.9	193.3	122.8	29.3	89.1	205.3	73.3	167.9	118.3	159.4	470.5
October.....	105.8	81.4	170.3	104.3	22.5	69.9	192.0	68.0	154.1	105.6	132.5	395.0
November..	103.1	79.0	166.3	104.7	20.4	80.1	193.2	67.7	154.1	115.7	129.5	359.2
December..	103.7	81.6	167.7	103.2	18.3	82.9	188.0	67.1	154.7	114.2	131.9	382.7

Month.	Types of Stocks.			
	Public Utilities.			
	Public Utilities Total.	Trans- portation.	Telephone and Telegraph.	Powers and Traction.
January.....	68.5	38.7	122.0	91.1
February.....	73.1	41.8	125.8	97.5
March.....	71.0	39.6	124.2	94.7
April.....	64.1	35.0	122.0	85.1
May.....	63.0	32.8	124.7	84.0
June.....	63.2	32.3	127.3	84.1
July.....	63.9	29.7	128.0	88.0
August.....	65.2	29.9	128.7	90.4
September.....	57.4	24.8	126.6	78.6
October.....	51.7	20.9	122.9	70.7
November.....	49.6	19.9	122.2	66.9
December.....	49.5	19.8	125.4	66.0

Preferred Stocks.—Preferred stock prices in 1937 continued to parallel the movements in industrial and utility common stock markets. Their recovery in recent years has been less decided than that shown for common stocks except in 1936, when the preferred section advanced 27 p.c. as compared with 20 p.c. for industrial and utility averages. The relative position of preferred issues was further improved in 1937 by a less pronounced decline of 14 p.c., approximately one-third less than the reaction in common stock averages. An index of 25 preferred stock prices advanced from 93.9 for December, 1936, to 103.1 in April, 1937, and then declined irregularly to 81.0 in December. The greatest part of this recession came in September and October.

12.—Index Numbers of 25 Preferred Stocks, by Months, January, 1927-April, 1938.

(1926=100.)

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1927.....	102.1	102.5	102.7	102.6	102.5	102.1	102.5	103.8	104.8	107.8	110.8	111.8
1928.....	111.5	110.9	109.9	111.4	111.7	111.2	110.3	107.5	107.6	106.2	104.0	107.9
1929.....	107.4	108.1	106.8	104.3	104.3	104.8	104.8	105.6	105.1	102.9	99.8	100.4
1930.....	97.9	98.8	100.0	103.4	102.6	99.5	97.4	97.1	96.2	85.4	81.9	82.5
1931.....	83.2	83.4	84.2	78.8	73.8	72.6	71.8	69.1	64.2	63.9	66.5	63.0
1932.....	57.2	58.8	58.0	55.4	48.4	45.2	49.5	52.9	53.4	52.9	52.2	50.2
1933.....	49.6	49.6	47.3	47.2	54.6	58.5	61.9	61.7	61.0	59.7	59.1	60.2
1934.....	64.1	66.5	67.3	68.5	68.7	68.4	68.1	67.3	67.4	69.5	70.6	71.4
1935.....	73.5	73.8	71.2	69.2	68.4	68.4	69.6	70.9	69.2	69.5	72.5	73.8
1936.....	74.9	77.2	76.3	76.0	74.6	76.2	79.5	80.6	83.8	86.8	91.1	93.9
1937.....	99.2	100.4	102.6	103.1	100.2	99.3	99.4	101.5	91.0	82.2	82.0	81.0
1938.....	83.4	82.1	77.5	78.2	-	-	-	-	-	-	-	-

Weighted Index Numbers of Mining Stocks.—The movement of mining stocks showed the same broad outline as that for industrials and utilities, but the amplitude of fluctuations and positions of turning points differed materially. The first decline in the mining section started sooner and was much more severe. The second was less pronounced and subsequent recovery offered a marked contrast to weakness in utilities and the hesitant behaviour of the industrial section. The year's peak in gold stock prices came on Feb. 3, when an index for 21 gold issues reached 142.0, up 6 points from the first of the year. The decline which followed was gradual at first, but accelerated during April, and despite repeated rallies reactionary forces continued to predominate until the latter half of June. From 101.6 on June 23, the index moved up to 115.4 on Aug. 16, only to establish successive new lows of 98.7 and 96.5 on Sept. 10 and Oct. 19, respectively. A strong rebound followed by more gradual but persistent advances brought the series up again to 118.3 on Dec. 31.

Fluctuations in base metal stock prices were the most violent in many years. The net decline for 1937, indicated by comparison of 1936 and 1937 December averages, was 33 p.c., as compared with 12 p.c. for gold issues. Although the year's peak in base metals came later in February, major turning points for the group coincided closely with those for the gold section. They were marked by the following daily price indexes: 321.8 on Jan. 4, 372.6 on Feb. 22, 234.9 on June 23, 299.8 on Aug. 7, 168.7 on Oct. 19, and 214.7 on Dec. 31. The closing rise in stock prices anticipated later improvement in commodity markets.

13.—Weighted Index Numbers of Prices of Mining Stocks (on the 1926 Base), by Months, January, 1936, to April, 1938.

Year and Month.	Gold.	Base Metal.	Total.	Year and Month.	Gold.	Base Metal.	Total.
1936.				1937—con.			
January.....	124.8	214.8	142.4	March.....	133.0	340.5	172.6
February.....	130.2	230.4	149.8	April.....	120.0	288.0	154.1
March.....	122.7	232.2	144.2	May.....	111.3	269.3	142.1
April.....	122.8	241.1	145.8	June.....	105.9	255.0	134.7
May.....	128.9	239.2	150.3	July.....	109.2	278.9	141.8
June.....	134.4	246.0	156.1	August.....	112.5	287.4	146.2
July.....	134.4	254.1	157.6	September.....	103.5	224.5	127.6
August.....	132.6	264.0	158.1	October.....	104.3	192.4	121.6
September.....	131.2	267.1	157.6	November.....	113.8	192.4	129.4
October.....	126.4	289.4	158.2	December.....	115.5	213.1	134.3
November.....	131.8	312.5	167.0				
December.....	131.3	317.8	167.7	1938.			
1937.				January.....	121.0	241.7	144.1
January.....	137.5	329.6	174.6	February.....	124.3	246.9	147.7
February.....	139.4	344.8	177.2	March.....	111.4	225.3	134.9
				April.....	110.5	229.5	133.9

Section 4.—Prices of Services.

A study of the prices of services sheds considerable light on the cost of living, as such services are a considerable item in the average family budget. Information with regard to the trend of street-car fares, of rates for manufactured and natural fuel-gas, of domestic electric-light rates and of telephone charges was published at pp. 801-804 of the 1927-28 Year Book. Later information shows that the prices of manufactured fuel-gas have shown a downward tendency, the Dominion index number for 1936 being 93.0, as compared with 100.0 in 1926. The index number of the price of natural fuel-gas also declined from 100.0 in 1926 to 92.5 in 1930, rose again to 94.3 in 1932, then declined to 92.6 in 1936.

On the other hand, telephone rates have shown a distinct increase, the Dominion index number of domestic telephone rates having risen from 100.0 in 1926 to 107.4 for 1933, 1934, 1935, and 1936. Again, the business telephone rate has risen from 100.0 in 1926 to 118.5 for 1933, 1934, 1935, and 1936.

Additional information and details by provinces regarding the prices of services will be found at pp. 119-130 of the Annual Report on Prices and Price Indexes, 1913-36, issued by the Dominion Bureau of Statistics.

Hospital Charges.—In view of discussions of the increased cost entailed by illness and hospital treatment, special investigations on hospital charges are now made annually and the results are given as Dominion averages in the following table. In general, this shows that hospital charges in 1930 were 94 p.c. above the 1913 level. From 1930 to 1935 rates gradually declined to less than 89 p.c. above those in 1913, then rose slightly in 1936. Operating room charges have not increased at the same rate as room charges, being only 54 p.c. above those in 1913, while the latter averaged almost 90 p.c. higher. The cost of maintaining patients in hospitals declined more than 11 p.c. between 1930 and 1936.

The detailed results of this investigation, including the statistics by provinces, are to be found at pp. 120-124 of the Annual Report on Prices and Price Indexes, 1913-36, issued by the Dominion Bureau of Statistics.

14.—Average Daily Hospital Charges in Canada and Index Numbers Thereof (on the 1913 Base), 1913 and 1922-36.

Item.	1913.	1922.	1923.	1924.	1925.	1926.	1927.	1928.
Public wards.....\$	0.99	1.71	1.73	1.77	1.78	1.83	1.86	1.96
Index numbers.....	100.0	175.0	177.1	180.4	181.2	183.2	185.2	196.9
Semi-private rooms.....\$	1.57	2.69	2.73	2.74	2.84	2.82	2.83	2.85
Index numbers.....	100.0	173.1	175.6	176.1	182.2	185.2	186.3	187.8
Private rooms.....\$	2.68	4.49	4.52	4.58	4.92	5.07	5.14	5.25
Index numbers.....	100.0	169.1	170.3	172.3	185.9	188.5	191.1	195.3
Operating room.....\$	5.16	7.24	7.64	7.87	7.97	8.17	8.31	8.36
Index numbers.....	100.0	141.8	148.9	153.0	155.1	156.7	159.1	160.1
Costs of maintenance per head.....\$	1.68	3.12	3.17	3.25	3.26	3.48	3.45	3.49
Index numbers.....	100.0	189.7	192.5	197.1	198.3	201.9	199.7	202.3
Item.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Public wards.....\$	2.03	2.04	2.03	2.03	1.99	1.98	1.98	1.99
Index numbers.....	203.9	204.5	204.1	204.1	200.6	199.1	199.5	200.1
Semi-private rooms.....\$	2.87	2.89	2.89	2.85	2.82	2.80	2.79	2.79
Index numbers.....	189.1	190.4	190.2	188.0	185.8	184.8	183.7	183.9
Private rooms.....\$	5.23	5.24	5.23	5.11	5.06	5.06	5.01	5.01
Index numbers.....	194.5	194.9	194.5	190.2	188.1	187.2	186.4	186.4
Operating room.....\$	8.37	8.36	8.33	8.23	8.14	8.10	8.09	8.04
Index numbers.....	160.3	160.1	159.7	157.6	156.1	155.1	155.0	154.0
Cost of maintenance per head.....\$	3.62	3.63	3.58	3.44	3.25	3.22	3.23	3.23
Index numbers.....	210.4	211.2	207.8	199.9	189.0	187.2	188.0	188.2

Section 5.—Index Numbers of Bond Yields.*

Few economic statistics are of more significance than the net rates of return received on absolutely the safest securities, such as government bonds maturing on a fixed date. Interest rates naturally grade upward from the rates which the safest of possible borrowers has to pay, and from the fluctuations of that price an idea may be obtained as to the relation between the supply of, and the demand for, funds for investment.

The exceptional requirements of the war years turned the Dominion authorities to the internal market, a field which had hitherto served mainly the needs of the provinces and municipalities. To the latter, therefore, it is necessary to go for earlier historical records of long-term bond yields in the internal market. Province of Ontario issues covering the years from 1900 to date are available in this field, and were utilized for the first long-term bond yield index constructed by the Bureau of Statistics. The relatively long period for which these records have been preserved makes this series of considerable value. On pp. 805 and 806 of the 1937 Year Book a statement will be found bearing on the movements of Ontario bond yields since 1900. Since the War, however, the growing importance of Dominion financing in the domestic market has made it advisable to supplement the Ontario series with the Dominion index of bond yields shown in Table 15.

* The index of Ontario long-term bond yields formerly shown may be found in the Bureau's monthly bulletin "Prices and Price Indexes", obtainable from the Dominion Statistician.

Prices of Dominion of Canada long-term bonds declined moderately during 1937, but remained well above average levels of recent years. Year-end averages showed a net loss of approximately 2 p.c., but were only 3 p.c. below the all-time peak levels of August and September, 1936. An index of prices for representative Dominion long-term issues dropped from 118.2 for December, 1936, to 112.7 for April, 1937. Gradual recovery subsequently caused the index to advance to 115.5 for August, and it closed at 115.6 after narrow intervening fluctuations. Weakness in February and March appeared to be mainly associated with outside factors, as there were no new financing operations or other disturbing internal developments at this time. Refunding and loan operations of the Dominion and provinces proved generally successful. Eastern provincial issues were firm throughout the year and in some cases showed greater strength than Dominion maturities. Saskatchewan and Alberta bonds suffered appreciable losses, while those for Manitoba and British Columbia registered moderate net declines.

15.—Index Numbers of Dominion of Canada Long-Term Bond Yields, by Months, 1919-38.

(1926=100.)

Month.	1919.	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.
January.....	117.9	116.7	125.2	113.6	107.0	104.0	100.3	99.9	97.6	89.2
February.....	116.8	117.9	122.3	112.5	104.3	104.2	99.7	99.6	96.5	89.5
March.....	113.5	119.7	123.2	111.7	103.8	104.5	99.8	100.0	97.3	90.1
April.....	111.3	120.9	125.4	111.3	104.0	105.5	100.0	100.1	95.7	90.3
May.....	111.3	122.9	124.0	110.6	104.4	104.9	99.8	100.1	94.6	89.5
June.....	109.7	124.6	125.1	111.8	104.0	104.6	98.5	100.4	95.7	93.3
July.....	111.9	126.6	124.6	111.5	104.0	103.6	99.8	100.0	96.4	94.4
August.....	112.5	128.2	124.7	111.5	104.4	102.5	100.4	100.0	94.7	95.9
September.....	112.7	130.4	124.7	110.7	104.4	101.2	100.4	100.1	95.4	95.2
October.....	113.4	131.8	124.8	111.3	105.7	100.2	100.8	100.1	94.0	96.2
November.....	113.4	134.2	119.4	112.1	106.2	100.2	101.0	100.1	92.8	95.9
December.....	115.4	130.8	116.3	109.6	105.2	100.6	100.1	99.3	90.2	97.1
Month.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.
January.....	97.3	102.1	93.9	112.7	96.3	93.2	70.9	72.4	64.6	66.3
February.....	98.3	101.4	93.6	112.2	96.0	91.0	73.2	70.8	68.4	65.4
March.....	102.3	101.1	91.9	109.1	97.7	86.1	71.4	69.9	72.7	64.7
April.....	100.9	99.3	90.0	109.8	96.6	83.8	72.2	69.5	73.2	63.7
May.....	100.2	98.4	89.3	109.3	95.0	81.8	71.4	68.8	71.0	-
June.....	104.0	98.2	88.3	111.7	93.3	82.1	73.4	66.9	69.3	-
July.....	104.0	98.0	88.3	107.5	93.5	80.1	72.1	65.1	69.0	-
August.....	102.0	95.9	88.3	100.5	92.2	77.8	71.6	63.2	68.1	-
September.....	102.8	93.9	95.5	98.7	92.4	77.2	79.8	63.1	68.3	-
October.....	103.7	93.6	105.2	96.2	93.5	79.3	78.9	66.2	69.7	-
November.....	103.3	93.6	107.7	98.5	94.3	77.2	74.5	65.1	68.8	-
December.....	101.4	93.9	111.7	99.4	95.1	71.3	75.5	64.1	67.4	-

Section 6.—Wholesale Price Index Numbers of Principal Imports and Exports.

For a country such as Canada, whose economy is vitally affected by foreign trade, the importance of statistics relating to all phases of international commerce is readily apparent. Prices of imports and exports, although of less general concern than aggregate values, are nevertheless significant, and the examination of price fluctuations must form a part of any complete analysis of trade statistics. If trade value figures decline, it is important to know whether this represents a contraction of markets or simply a reduction in prices with volume maintained at former levels. Indexes of both volume and price are necessary for a complete knowledge of such facts. They are also useful in determining the influence of tariff policy upon trade movements. It is likewise of considerable importance that repercussions of international price fluctuations upon domestic price levels should be observed, and measurements made of their effect.

The calendar year import and export valuation indexes formerly published have been replaced by a new and more comprehensive series of wholesale price index numbers for principal imports and exports. These are available from 1913 to the present time on the base 1926=100. They compare closely with the corresponding valuation indexes and have been constructed so as to be directly comparable with other wholesale price index numbers which the Bureau publishes. From 1934 onward, the new series is available upon a monthly basis.

16.—Index Numbers of Wholesale Prices of Exports and Imports, 1913-1937.

(1926=100.)

EXPORTS.

Year.	Vegetables and Their Products.	Animals and Their Products.	Fibres, Textiles and Textile Products.	Wood, Wood Products and Paper.	Iron and Its Products.	Non-Ferrous Metals and Their Products.	Non-Metallic Minerals and Their Products.	Chemicals and Allied Products.	Total Exports.
1913.....	60.6	61.3	63.2	58.3	73.9	89.0	93.7	75.3	64.7
1914.....	67.8	60.2	59.6	58.4	71.6	82.6	80.1	75.1	66.5
1915.....	84.7	63.3	66.4	57.3	82.7	113.7	106.6	75.1	78.1
1916.....	91.9	74.3	82.7	63.4	111.9	143.7	106.6	74.2	88.7
1917.....	142.4	94.9	166.3	78.6	160.6	141.8	122.0	85.6	120.5
1918.....	145.5	107.5	196.1	88.9	177.9	126.1	128.7	105.6	126.2
1919.....	151.1	142.8	181.7	106.4	148.3	119.3	128.3	103.2	134.8
1920.....	168.2	136.9	139.7	156.2	196.1	129.9	152.4	128.9	158.1
1921.....	109.9	96.5	95.5	141.6	137.9	90.3	138.6	120.6	116.5
1922.....	84.4	96.5	82.5	105.9	110.3	90.2	129.1	106.9	94.7
1923.....	77.1	92.6	94.9	114.2	124.0	92.9	101.7	100.4	93.5
1924.....	88.2	82.6	104.4	108.9	118.8	96.2	99.7	98.1	95.7
1925.....	107.7	94.7	114.3	103.9	107.1	106.1	93.4	98.1	104.5
1926.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927.....	97.0	105.3	88.1	99.1	97.4	90.7	89.2	100.7	97.8
1928.....	88.8	111.3	95.3	98.7	91.9	87.5	83.8	98.2	94.2
1929.....	89.3	107.9	85.8	91.9	91.3	88.0	83.7	95.6	92.2
1930.....	65.3	94.2	69.5	87.3	87.4	75.4	81.5	92.9	77.4
1931.....	41.7	70.7	56.7	78.3	82.7	66.2	67.8	87.9	60.5
1932.....	40.4	55.7	39.6	68.1	81.3	65.2	66.1	68.3	54.9
1933.....	44.9	58.0	46.1	60.0	75.8	68.6	65.7	69.9	55.2
1934.....	53.4	64.5	59.1	62.5	78.0	67.6	71.2	72.2	60.6
1935.....	56.7	65.7	49.5	60.8	78.0	73.8	70.5	71.7	62.2
1936.....	63.9	69.5	61.4	65.0	80.1	71.1	71.3	71.8	66.8
1937.....	87.2	76.5	73.1	72.1	95.2	79.9	69.7	72.1	81.1

16.—Index Numbers of Wholesale Prices of Exports and Imports, 1913-1937—concluded.

(1926=100.)

IMPORTS.

Year.	Vegetables and Their Products.	Animals and Their Products.	Fibres, Textiles and Textile Products.	Wood, Wood Products and Paper.	Iron and Its Products.	Non-Ferrous Metals and Their Products.	Non-Metallic Minerals and Their Products.	Chemicals and Allied Products.	Total Imports.
1913.....	78.0	92.3	63.3	—	75.7	93.6	61.9	51.9	73.0
1914.....	80.2	95.6	60.5	—	68.6	79.1	55.2	55.4	69.3
1915.....	92.1	104.9	57.0	—	77.7	98.2	64.7	61.4	77.5
1916.....	105.7	129.0	79.8	—	112.2	146.9	67.6	88.5	100.0
1917.....	122.1	148.0	117.4	—	154.6	160.4	75.8	102.7	125.6
1918.....	132.2	147.0	150.2	—	152.3	162.9	86.4	116.9	135.5
1919.....	145.6	212.9	167.6	—	137.5	115.6	96.4	99.5	139.6
1920.....	200.6	178.8	172.7	—	152.1	116.4	118.5	114.1	158.8
1921.....	102.8	101.4	98.4	—	116.8	76.8	114.0	105.9	105.8
1922.....	98.4	102.4	105.7	—	101.2	79.2	104.4	99.2	100.4
1923.....	113.7	101.6	127.7	—	114.2	88.5	94.0	97.1	110.0
1924.....	105.7	97.1	113.5	—	113.2	88.2	93.8	95.7	105.0
1925.....	111.9	108.2	112.9	—	104.7	96.0	95.7	95.5	105.6
1926.....	100.0	100.0	100.0	—	100.0	100.0	100.0	100.0	100.0
1927.....	102.0	111.7	92.4	—	98.1	94.7	93.2	98.0	97.7
1928.....	94.0	132.0	94.7	—	94.8	99.7	88.4	92.3	96.1
1929.....	85.6	113.3	93.4	—	95.0	116.9	89.4	92.0	94.2
1930.....	75.0	94.5	75.5	—	91.1	84.7	87.3	87.5	83.7
1931.....	60.1	72.5	59.9	—	88.7	57.5	80.3	83.3	72.4
1932.....	57.6	59.1	52.6	—	91.1	46.5	84.8	86.3	70.5
1933.....	61.4	67.7	57.3	—	92.2	59.1	79.4	86.9	73.0
1934.....	65.0	69.7	64.2	—	92.7	66.7	83.6	88.0	76.5
1935.....	68.5	74.6	63.6	—	94.4	68.0	82.5	89.7	77.9
1936.....	68.4	78.7	67.7	—	96.3	71.5	82.0	86.9	79.4
1937.....	79.7	89.9	72.1	—	114.5	93.6	82.8	95.1	89.8

It will be seen from Table 16 that from 1926 to 1937 the total wholesale price index of exports showed a net decline of 8.7 p.c. more than that of imports. This is not unexpected in view of the preponderance of raw materials in Canadian export trade and the effect of the depression on such prices. For the low year of the depression, 1932, the total exports index was 54.9 and the imports index 70.5. From this level the recovery of export prices has therefore been 26.2 p.c. as compared with 19.3 for import prices. The groups in which recovery has been strongest for both exports and imports are: fibres, textiles and textile products; vegetables and their products; and animals and their products.

CHAPTER XXI.—PUBLIC FINANCE.

The following treatment of public finance includes an outline of Dominion, provincial, and municipal finance in Canada, supported by the necessary detailed statistics, and closes with a brief discussion of the national wealth and national income of the Dominion as the basis of all public finance.

The great increase in Dominion expenditure since 1913 has been due partly to the Great War with the resulting burden of interest, pension charges, etc., and partly to railway expenditures and social services including, latterly, unemployment relief. Increases on a commensurate scale have also taken place during the same period in provincial and municipal expenditures. Thus, in their fiscal years ended 1936, the total ordinary expenditure of the nine Provincial Governments was \$248,141,808 as compared with \$53,826,219 in 1916, only 20 years before—an increase of over 361 p.c. (The aggregate interest payments of Provincial Governments rose from \$7,817,844 in 1916 to \$79,893,083 in 1936). Again, in recent years, between 1924 and 1935, the aggregate tax receipts of the municipalities of Ontario have increased from \$94,526,271 to \$122,108,912 (comparable figures are not available for earlier years)—an increase of over 29 p.c. In Quebec the ordinary receipts of municipalities increased from \$33,288,115 in 1915 to \$79,471,242 in 1933—an increase of 139 p.c.; the 1934 and 1935 figures given in Table 30 are not comparable as explained in the footnote thereto. While taxation receipts in the Prairie Provinces and the Maritime Provinces, for those years for which comparable figures are available do not show an upward trend, except in the case of Nova Scotia, the figures cover relatively recent years in the majority of cases, and in the Prairie Provinces a larger proportion of tax levies has remained uncollected. In British Columbia the taxes collected by the municipalities totalled \$9,382,099 in 1917 and \$17,185,917 in 1935.

Public Debt of Canada.—The latest year for which a figure for the aggregate public debt of Canada can be given is 1936. The statement below is summarized from the statistics given in the respective Sections of this chapter, the guaranteed or indirect debt being shown separately. The figures with regard to provincial debt are for the respective fiscal years of the provinces ended in 1936, given on p. 878.

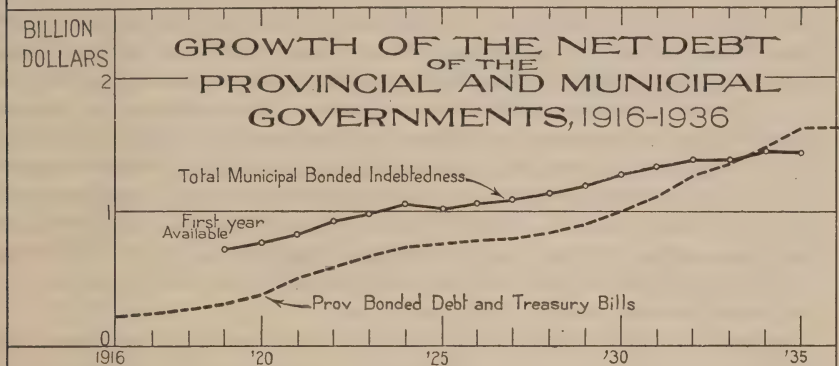
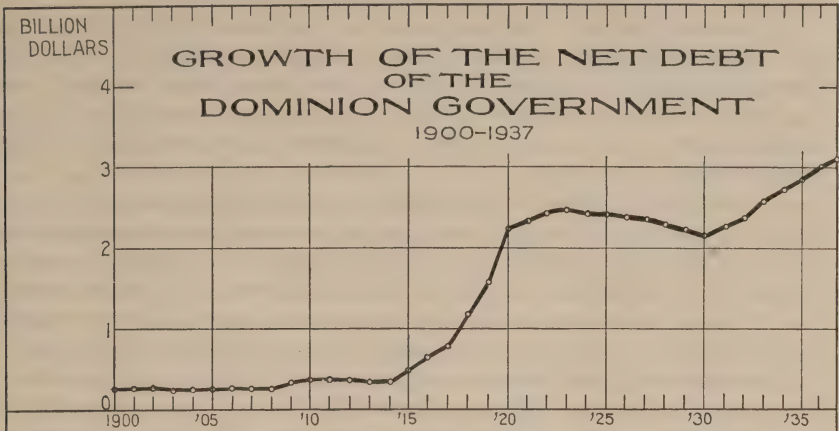
SUMMARY OF THE AGGREGATE PUBLIC DEBT OF CANADA (*CIRCA*) 1936.

(Dominion, Provincial, and Municipal Debt.)

NET DIRECT DEBT—	\$	\$
Net Debt of Dominion Government, Mar. 31, 1936.....	3,006,100,517	
Net Direct Liabilities Provincial Governments, 1936 (sinking funds and available capital, current and trust account assets deducted).....	1,084,107,202	
Direct Liabilities all Canadian Municipalities (less sinking funds and investments, 1935).....	1,445,537,075	
TOTAL NET DIRECT DEBT.....		5,535,744,794
GUARANTEED OR INDIRECT DEBT—		
Dominion Government, Mar. 31, 1936—		
Principal and interest guaranteed on railway and other securities.....	778,343,114	
Interest only guaranteed on railway securities.....	216,207,142	
Other Guarantees.....	284,247,286 ¹	
	1,278,797,542	
Provincial Governments—fiscal years 1936.....	224,549,202	
TOTAL GUARANTEED OR INDIRECT DEBT.....		1,503,346,744
GRAND AGGREGATE PUBLIC NET DIRECT DEBT AND GUARANTEED OR INDIRECT DEBT OF CANADA.....		7,039,091,538

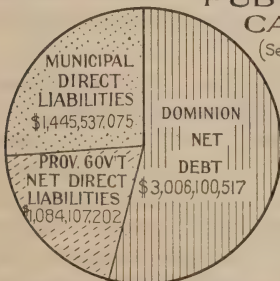
¹ Includes bank advances \$89,523,708, British Columbia and Manitoba Treasury Bills \$6,520,661, deposits of chartered banks in Bank of Canada \$188,202,917. There is also an unstated amount guaranteed for the Winnipeg Grain and Produce Clearing Association Limited for day to day margins of the Canadian Wheat Board.

PUBLIC DEBT OF CANADA

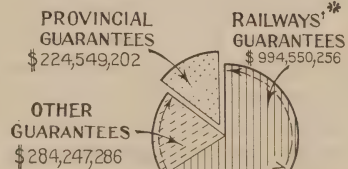


APPORTIONMENT OF AGGREGATE PUBLIC DEBT OF CANADA, 1936

(See text and statement on page 832)



NET DIRECT DEBT
\$5,535,744,794



GUARANTEED OR INDIRECT DEBT
\$1,503,346,744

* Including Canadian National Steamships and Harbour Commissions.

Section 1.—Dominion Public Finance.*

Historical Sketch.—Both under the French *régime* and in the earlier part of the British, the territorial or casual revenues of Canada, consisting of certain seigniorial dues and the proceeds of the sale of government timber and land, were reserved to the Crown, while the right of levying taxes and of regulating the trade and commerce of the colony was, after 1763, deemed to be vested in the British Parliament.

By the Quebec Act of 1774, certain duties on spirits and molasses were imposed, to be expended by the Crown in order to provide a revenue "towards defraying the expenses of the administration of justice and the support of the civil government of the province". A little later, in 1778, the British Government, by the Declaratory Act (18 Geo. III, c. 12), renounced forever the right of taxing the colonies to provide Imperial revenue, but maintained its claim to impose duties considered necessary for the regulation of trade, the proceeds to go towards defraying the expenditures of the colonial administration. After the Constitutional Act of 1791, the customs duties remained under the control of the Imperial Government, their revenue, as well as the territorial revenue above mentioned, coming in to the Executive Administration independently of the Legislative Assembly and thus making the Executive power largely independent of the Legislature. In case these revenues proved insufficient, recourse could generally be had to the grant made by the Imperial Government for the support of the army. As time went on, however, the Crown revenues became more and more inadequate to meet the increasing expenditure, while the wave of economy in the United Kingdom after 1815 made it impossible any longer to supplement these revenues from military sources. On the other hand, the purely provincial revenues collected under the authorization of the Provincial Legislature showed an increasing surplus. The power of the purse thus began to pass into the hands of the Legislatures; further, in 1831 the British Parliament passed an Act placing the customs duties at the disposal of the Legislatures.

Under the Act of Union, a consolidated revenue fund was established. All appropriation bills were required to originate in the Legislative Assembly, which was forbidden to pass any vote, resolution or bill involving the expenditure of public money unless the same had first been recommended by a written message of the Governor General. The British Government surrendered all control of the hereditary or casual revenues, which were thenceforth paid into the treasury of the province to be disposed of as its Legislature should direct.

At the interprovincial conference which took place prior to Confederation, it was decided that the new Dominion Government, which was to take over permanently, as its chief source of revenue, the customs and excise duties that had yielded the greater part of the revenues of the separate provinces (direct taxation being as unpopular in British North America as in other new countries), was also to assume the provincial debts and to provide out of Dominion revenues definite cash subsidies for the support of the Provincial Governments. (See Tables 15 and 16.) Until the Great War, which made other taxes necessary, the customs and excise revenue con-

* Revised under the direction of Dr. W. C. Clark, Deputy Minister, Department of Finance, with the exception of those parts dealing with war tax revenue and inland revenue on pp. 850 to 855, which were revised by the Department of National Revenue.

stituted the chief resource of the Dominion Government for general purposes—the Post Office revenue and the Government railway receipts, which are not taxes at all, being mainly or entirely absorbed by the expenses of administering these services. Indeed, for many years preceding the War, customs and excise duties, together with the revenue from the head tax on Chinese immigrants, were the only items of receipts which were classified as taxes by the Department of Finance. In the last pre-war fiscal year these two items aggregated \$126,143,275 out of total receipts on consolidated fund account amounting to \$163,174,395, the Post Office and Government railways furnishing between them \$26,348,847 of the remainder, offset, however, by expenditures on these two services amounting to \$27,757,196. Miscellaneous revenue, largely fees, amounted in that year to \$10,682,273—a comparatively small fraction of the total. As both customs and excise taxes were indirect, the average Canadian felt but little the pressure of taxation for Dominion purposes.

The War enormously increased the expenditure, and this increase had in the main to be met by loans. It is, however, a cardinal maxim of public finance that, where loans are contracted, sufficient new taxation should be imposed to meet the interest charge upon the loans and to provide a sinking fund for their ultimate extinction. This war taxation was begun in Canada within the first weeks of the War when, in the short war session of August, 1914, increases were made in the customs and excise duties on various commodities, including, coffee, sugar, spirituous liquors, and tobacco. In 1915 special additional duties of 5 p.c. *ad valorem* were imposed on commodities imported under the British preferential tariff and $7\frac{1}{2}$ p.c. *ad valorem* on commodities imported under the intermediate and general tariffs, certain commodities being excepted. New internal taxes were also imposed on bank circulation, on the income of trust and loan companies, on insurance in other than life and marine companies, on telegrams and cablegrams, railway tickets, sleeping-car berths, etc., also on cheques, postal notes, money orders, letters and post cards. In the following year, the business profits war tax (dropped in 1921)* was introduced, and in 1917 an income tax was imposed. In 1918 both of these taxes were increased and their application widened, and in 1919 the income tax was again increased, and still further augmented in 1920 by a surtax of 5 p.c. of the tax on incomes of \$5,000 and over; the sales tax was also introduced in 1920. The cumulative result of these war taxes was that, in the fiscal year ended Mar. 31, 1921, customs duties were for the first time displaced from their position as the chief factor in Canadian revenue, the war taxes yielding \$168,385,327, as against the customs yield of \$163,266,804. This situation has remained true down to 1937 with the exception of the period between 1928 and 1931, when customs duties temporarily assumed their former position.

The importance which the sales tax has attained as a source of revenue will be seen from Tables 9 and 10. When first introduced in 1920 the tax was 1 p.c. on sales but the rate has been varied from year to year and from May 2, 1936, has been 8 p.c. A statement is appended showing the changes made from the inception of the tax up to the present. A lesser, but still substantial, source of revenue is the special excise tax on importations, instituted in 1931, the changes in rates of which are shown in Statement II.

* Belated revenue from this tax has been collected in subsequent fiscal years down to 1933 (see Table 8, p. 851).

I.—STATEMENT OF SALES TAX CHANGES, 1920-38.

NOTE.—Sales tax is payable by purchaser to manufacturer or wholesaler. For proceeds of tax, see Tables 2, 9, and 10.

From—	To—	Domestic Sales.	Importations.
May 19, 1920.....	June 16, 1920.....	1 p.c. on sales by manufacturers. 1 p.c. on sales by wholesalers.	1 p.c. on importations.
June 17, 1920.....	May 9, 1921.....	1 p.c. on sales by manufacturers to wholesalers. 1 p.c. on sales by wholesalers. 2 p.c. on sales by manufacturers to retailers or consumers.	1 p.c. on importations by manufacturers and by wholesalers. 2 p.c. on importations by retailers or consumers.
May 10, 1921.....	May 23, 1922.....	1½ p.c. on sales by manufacturers to wholesalers. 1½ p.c. on sales by wholesalers. 3 p.c. on sales by manufacturers to retailers or consumers. Except lumber, upon which tax was 2 p.c. on all domestic sales.	2½ p.c. on importations by manufacturers and by wholesalers. 4 p.c. on importations by retailers or consumers. Except lumber, upon which tax was 3 p.c. on all importations.
May 24, 1922.....	Dec. 31, 1923.....	2½ p.c. on sales by manufacturers to wholesalers. 2½ p.c. on sales by wholesalers. 4½ p.c. on sales by manufacturers to retailers or consumers. Except lumber, upon which tax was 3 p.c. on all domestic sales.	3½ p.c. on importations by manufacturers and by wholesalers. 6 p.c. on importations by retailers and consumers. Except lumber, upon which tax was 4½ p.c. on all importations.
Jan. 1, 1924.....	Apr. 10, 1924.....	6 p.c. on sales by manufacturers or producers. (3 p.c. on a restricted list.)	6 p.c. on importations. (3 p.c. on a restricted list.)
Apr. 11, 1924.....	Feb. 17, 1927.....	5 p.c. on sales by manufacturers. (2½ p.c. on a restricted list.)	5 p.c. on importations. (2½ p.c. on a restricted list.)
Feb. 18, 1927.....	Feb. 16, 1928.....	4 p.c. on sales by manufacturers. (2 p.c. on a restricted list.)	4 p.c. on importations. (2 p.c. on a restricted list.)
Feb. 17, 1928.....	Mar. 1, 1929.....	3 p.c. on sales by manufacturers. (1½ p.c. on a restricted list.)	3 p.c. on importations. (1½ p.c. on a restricted list.)
Mar. 2, 1929.....	May 1, 1930.....	2 p.c. on sales by manufacturers. (1 p.c. on a restricted list.)	2 p.c. on importations. (1 p.c. on a restricted list.)
May 2, 1930.....	June 1, 1931.....	1 p.c. on sales by manufacturers. (½ of 1 p.c. on a restricted list.)	1 p.c. on importations. (½ of 1 p.c. on a restricted list.)
June 2, 1931.....	Apr. 6, 1932.....	4 p.c. on sales by manufacturers. (2 p.c. on a restricted list and 2 p.c. on a restricted list of commodities produced or manufactured in Canada.)	4 p.c. on importations. (2 p.c. on a restricted list.)
Apr. 7, 1932.....	Mar. 21, 1933.....	6 p.c. on sales by manufacturers. (3 p.c. on a restricted list and 3 p.c. on a restricted list of commodities produced or manufactured in Canada.)	6 p.c. on importations. (3 p.c. on a restricted list.)

There were no increases in duty under the British preferential tariff. The intermediate rate on furniture was raised from 30 p.c. to 37½ p.c., in each case less a discount of 10 p.c. to most-favoured-nations, as the result of a Tariff Board report received while the House of Commons was in committee. Other increases of the intermediate or general tariff were few in number and of minor importance.

As a result of commercial arrangements with other countries, Canada, during 1937, extended her intermediate tariff to the Panama Canal Zone and accorded Brazil most-favoured-nation treatment. All non-self-governing British colonies and specified mandated territories were given most-favoured-nation treatment, and the list of countries entitled to the British preferential tariff was expanded by the addition of a number of non-self-governing colonies not already receiving its benefits. And, finally, the trade agreements with Australia and New Zealand were revised and extended. Canada granted some additional concessions to Australia and New Zealand, of which probably the most important was a reduction of the rate on lamb and mutton from 3 cents per lb. to ½ cent per lb. The reduced rates went into effect on Oct. 1, 1937.

A statement at pp. 811-817 of the 1937 Year Book showed complete details of the Dominion tax system as of July, 1936.

Subsection 1.—The Current Balance Sheet of the Dominion.

A summary review of the current financial situation of the Dominion as at Mar. 31, 1933-37, is given in the balance sheet shown as Table 1. This shows the figures for gross debt on Mar. 31, 1937, to have been \$3,542,521,139, partly offset by active assets aggregating \$458,568,837, leaving the net debt at \$3,083,952,202. Non-active assets, including such public works as canals and railways, also loans to railways, amounted in the aggregate to \$1,833,901,293, leaving a debit balance on Consolidated Fund Account on Mar. 31, 1937, of \$1,250,050,909. The details of the various assets and liabilities are contained in the schedules accompanying the balance sheet and printed in the Public Accounts.

1.—Balance Sheets of the Dominion of Canada, as at Mar. 31, 1933-37.

NOTE.—Dashes indicate that the items were not applicable in the years so indicated.

Item.	1933. \$	1934. \$	1935. \$	1936. \$	1937. \$
ASSETS.					
Active Assets—					
Cash on hand and in banks..	1,555,876	9,874,579	16,296,697	20,243,808	26,239,458
Specie reserve.....	69,875,518	71,406,030	2,443,224	2,236,629	—
Bank of Canada, Class "B" shares.....	—	—	—	—	5,100,000
Railway accounts ¹	14,677,338	17,305,439	33,884,413	46,087,498	56,335,222
Advances to provinces, Harbour Commissions, Canadian Farm Loan Board, etc.....	185,226,291	191,920,713	175,034,198	223,788,091	231,014,250
Advances to foreign governments.....	30,494,720	30,494,720	30,494,720	30,494,720	30,494,720
Soldier and general land settlement loans.....	47,711,084	45,219,132	44,648,325	43,594,540	42,477,774
Miscellaneous current accounts.....	50,345,012	44,843,344	57,043,834	59,398,223	66,907,513
Totals, Active Assets.....	399,885,839	411,068,957	359,845,411	425,843,509	458,568,837

For footnotes, see end of table, p. 840.

1.—Balance Sheets of the Dominion of Canada, as at Mar. 31, 1933-37—concluded.

Item.	1933. \$	1934. \$	1935. \$	1936. \$	1937. \$
ASSETS—concluded.					
Balance of liabilities over active assets, being net debt, Mar. 31.....	2,596,480,826	2,729,978,140	2,846,110,958	3,006,100,517	3,083,952,202
Total, Gross Debt	2,996,366,665	3,141,042,097	3,205,956,369	3,431,944,026	3,542,521,139
Non-Active Assets—					
Public works, canals.....	240,104,671	242,079,743	242,411,265	242,855,235	242,726,334
Public works, railways.....	443,546,600	443,182,346	442,884,582	442,910,909	443,109,941
Public works, miscellaneous.....	247,245,431	252,124,944	259,118,195	265,165,018	267,970,363
Military property and stores.....	12,035,420	12,035,420	12,035,420	12,035,421	12,035,420
Territorial accounts.....	9,895,948	9,895,948	9,895,948	9,895,948	9,895,948
Railway accounts (old).....	88,398,829	88,398,829	88,398,829	88,398,829	88,398,829
Railway accounts (loans non-active).....	655,527,456	655,527,456	655,527,455	655,527,455	655,527,456
Canadian National Steamships (loans non-active)...	15,367,531	15,353,467	15,840,634	15,507,970	13,754,191
Miscellaneous investments and other accounts (non-active).....	72,941,777	75,960,711	77,192,578	79,621,230	100,482,811
Balance Consolidated Fundas at Mar. 31 of preceding year	667,125,993	811,417,164	935,419,276	1,042,806,052	1,194,182,502
Excess of expenditure over revenue, year ended Mar. 31.	144,291,170	124,002,112	107,386,776	151,376,450	55,868,407
Totals, Non-Active Assets or Net Debt.....	2,596,480,826	2,729,978,140	2,846,110,958	3,006,100,517	3,083,952,202
LIABILITIES. ²					
Dominion notes in circulation	180,926,882	172,617,922	3	3	3
Bank Note Circulation Redemption Fund.....	6,584,813	6,486,355	6,696,471	6,857,942	7,019,898
Post Office account, money orders, postal notes, etc., outstanding.....	2,184,456	3,570,744	2,137,533	2,726,925	4,074,164
Post Office Savings Bank deposits.....	23,920,915	23,158,919	22,547,006	22,047,287	21,879,593
Insurance and superannuation funds.....	98,500,190	109,481,507	126,166,496	150,614,097	176,973,747
Trust funds.....	18,525,396	18,271,120	19,587,159	20,943,718	20,933,993
Contingent and special funds.....	2,594,601	4,441,481	5,625,412	6,044,065	13,597,412
Province accounts.....	9,623,817	9,623,817	9,623,817	9,623,817	9,623,817
Funded debt less sinking funds.....	2,651,898,934	2,791,706,560	3,011,713,862	3,211,347,008	3,285,066,671
Interest due and outstanding.....	1,606,661	1,683,672	1,858,613	1,739,167	3,351,844
Totals, Liabilities or Gross Debt.....	2,996,366,665	3,141,042,097	3,205,956,369	3,431,944,026	3,542,521,139

¹ Included in "Miscellaneous current accounts" in earlier Year Books.² Direct liabilities only.

Indirect liabilities or guarantees given by the Dominion of Canada are listed in Table 22, on pp. 865-866.

³ The Bank of Canada assumed liability for outstanding Dominion notes from Mar. 11, 1935.

Subsection 2.—Receipts and Disbursements.

The receipts of the Dominion Government on Ordinary Account for the fiscal year ended Mar. 31, 1937, were \$445,028,955, an increase of \$72,806,749 as compared with the previous year; besides these, special receipts amounted to \$8,463,997 and other credits, including refunds to capital account and credits to non-active accounts, amounted to \$660,795—a total revenue of \$454,153,747. The regular expenditure on Ordinary Account was \$387,112,072, while Special Expenditures amounted to \$78,003,702. Under the category of "Government-Owned Enterprises", total disbursements amounted to \$44,218,526, under "Capital Account" to \$3,491,544, and under "Write Down of Assets" to \$19,179,588. Thus total disbursements amounted to

\$532,005,432. There was an increase of \$77,851,685 in the net debt (gross debt less active assets) during the year. (See Table 20 for interest-bearing debt.)

Detailed statistics of receipts and disbursements are contained in Tables 2 and 3. Tables 4 and 5 are historical tables giving the figures of the main items of Dominion receipts and expenditures since Confederation, while Table 6 shows the per capita receipts and expenditures for these years, calculated on census and estimated populations. Per capita receipts and expenditures are given by principal items in Table 7.

Changes in the Public Accounts, 1936.—Several important changes were made under various headings in the Public Accounts for 1936. On the revenue side "War and Demobilization Receipts", previously carried as "Special Receipts", were transferred to Ordinary Account (Casual Revenue). On the expenditure side several recurring items were also transferred from "Special" to "Ordinary", as follows: cost of loan flotations, representing flotation costs of new loans and annual charges for amortization of bond discount; the Government's annual contribution to the Superannuation Fund; the annual payment to maintain the reserve in the Government Annuities Fund; adjustment of war claims; and expenditures made under the Railway Grade Crossing Act. A new category was established under the heading "Government-Owned Enterprises", to cover expenditures incurred by the Government on account of the Canadian National Railways, the Canadian National Steamships and various Harbour Commissions. Other major changes were the establishment of a separate category for Write Down of Assets, and transference of payment of Old Age Pensions from the Department of Labour to the Department of Finance.

In Tables 2, 3, and 7 the new classification of items has been adopted for the 1936 and 1937 figures and the figures for 1933 to 1935 have been adjusted to the new basis. The result is that the figures for each year as given in the tables do not conform with the figures shown in the Public Accounts for that same year, because of the new set-up for 1936, but the figures below are on a comparable basis throughout.

2.—Details of Revenue Receipts, fiscal years ended Mar. 31, 1933-37.

NOTE.—See text above *re* adjustment of statistics for 1933-35 as compared with earlier Year Books. Dashes in this table indicate that no revenue was collected under the corresponding heads because the items were not applicable in the years so indicated.

Item.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
Consolidated Fund Receipts—					
Taxation—					
Customs.....	70,072,932	66,305,356	76,561,975	74,004,560	83,771,091
Excise duties.....	37,833,858	35,494,220	43,189,655	44,409,797	45,956,857
Wax Tax Revenue—					
Banks.....	1,327,535	1,335,546	1,368,480	1,280,933	1,209,894
Insurance companies.....	826,150	741,681	750,100	760,843	774,363
Business profits.....	54	—	—	—	—
Income tax.....	62,066,697	61,399,172	66,808,066	82,709,803	102,365,242
Sales tax.....	56,813,813	61,391,400	72,447,311	77,551,974	112,832,259
Tax on cheques, transportation tax, etc.....	25,377,762	45,184,175	39,744,759	35,181,074	39,641,163
Tax on gold.....	—	—	3,573,383	1,412,825	—
Totals, Receipts from Taxation..	254,318,801	271,851,550	304,443,729	317,311,809	386,550,869

2.—Details of Revenue Receipts, fiscal years ended Mar. 31, 1933-37—concluded.

Item.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
Consolidated Fund Receipts—concluded.					
Non-Tax Revenue—					
Canada Grain Act.....	1,444,840	1,235,621	1,204,536	1,213,087	1,192,099
Canada Gazette.....	73,836	55,722	47,257	49,295	47,697
Canals.....	831,020	877,630	837,871	889,764	1,003,765
Casual.....	3,205,163	3,621,720	4,336,881	4,636,537	6,275,858
Chinese revenue.....	8,652	6,237	5,506	6,476	7,444
Dominion lands, parks, etc.....	458,934	418,729	516,389	457,680	478,133
Electricity inspection.....	298,352	440,290	484,498	542,101	646,117
Fines and forfeitures.....	212,075	177,812	89,806	294,674	134,389
Fisheries.....	4,429	39,508	42,935	42,104	55,656
Gas inspection.....	84,078	76,186	96,096	90,948	93,289
Insurance inspection.....	160,298	148,535	139,304	146,874	151,966
Interest on investments.....	11,220,989	11,148,232	10,963,478	10,614,125	11,231,035
Marine.....	178,118	207,532	218,437	221,673	263,260
Mariners' Fund.....	178,961	188,054	181,203	187,448	204,525
Military College.....	20,116	20,317	20,044	19,616	20,012
Military pensions revenue.....	166,414	165,207	173,794	178,408	186,515
Ordnance lands.....	16,677	17,855	15,819	15,685	15,451
Patent and copyright fees.....	539,341	429,341	425,677	454,762	463,850
Penitentiaries.....	121,426	97,962	73,765	67,683	62,324
Post Office.....	30,928,317	30,893,157	31,248,324	32,507,889	34,274,552
Premium, discount, and exchange (net).....	145,938	—	751,491	35,600	—
Public works.....	212,830	249,721	254,158	251,273	274,431
Radio receiving licences.....	1,404,351	1,291,485	1,487,408	1,574,431	989,619
R.C.M.P. officers' pensions.....	12,050	12,444	9,202	10,807	10,195
Weights and measures inspection....	394,223	399,717	407,303	401,457	395,904
Totals, Non-Tax Revenue.....	52,321,428	52,219,014	54,031,182	54,910,397	58,478,086
Totals, Consolidated Fund Receipts...	306,640,229	324,070,564	358,474,911	372,222,206	445,028,955
Special Receipts—					
Sundry receipts and credits.....	4,489,339	409,271	3,397,169	319,833	8,463,997
Other Credits—					
Refunds on capital account.....	500,774	89,752	80,409	27,033	616,069
Credits to non-active accounts.....	104,944	91,003	21,275	26,924	44,726
Totals, Other Credits.....	605,718	180,755	101,684	53,957	660,795
Grand Totals, Receipts.....	311,735,286	324,660,590	361,973,764	372,595,996	454,153,747

3.—Details of Expenditures, fiscal years ended Mar. 31, 1933-37.

NOTE.—See text on p. 841 re new classification. Dashes in this table indicate that there were no expenditures under the corresponding heads because the items were not applicable in the years so indicated.

Item.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
Ordinary Expenditures—					
Agriculture.....	8,066,372	6,995,768	7,106,535	9,399,311	8,741,070
Auditor General's Office.....	379,847	375,791	376,556	428,665	423,367
Civil Service Commission.....	243,777	221,096	220,787	258,688	304,921
External Affairs, including Office of Prime Minister.....	863,055	974,172	1,426,999	1,289,879	1,340,912

3.—Details of Expenditures, fiscal years ended Mar. 31, 1933-37—continued.

Item.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
Ordinary Expenditures—concluded.					
Finance—					
Interest on public debt.....	134,999,069	139,725,417	138,533,202	134,549,169	137,410,345
Cost of loan flotations.....	1,639,154	2,549,981	2,890,192	3,576,858	3,839,481
Subsidies to provinces.....	13,677,384	13,727,565	13,768,953	13,768,953	13,735,196
Special grants to provinces.....	1,600,000	1,600,000	1,600,000	3,975,000	3,225,000
Other grants and contributions.....	498,675	395,686	466,505	736,505	540,224
Superannuation.....	1,074,529	1,009,392	921,925	835,124	768,046
Government contribution to Superannuation Fund.....	2,269,986	1,985,564	1,947,495	1,874,964	2,018,754
Old age pensions.....	11,512,543	12,313,595	14,942,459	16,764,484	21,149,352
Premium, discount, and exchange (net).....	—	167,026	—	—	399,930
Other departmental expenditure.....	2,049,720	3,152,063	3,939,064	3,734,888	3,578,449
Fisheries.....	1,786,912	1,596,453	1,640,562	1,710,345	1,690,610
Governor General's Secretary's Office.....	136,014	136,180	132,789	137,857	143,216
Insurance.....	160,618	151,934	156,397	162,798	171,658
Justice Department—					
Justice.....	2,457,786	2,434,400	2,410,414	2,454,869	2,502,594
Penitentiaries.....	2,869,735	2,676,505	2,667,340	2,376,651	2,371,932
Labour Department—					
Labour.....	605,426	560,706	581,215	659,577	720,376
Technical education.....	201,736	129,071	90,720	98,774	76,222
Government annuities—payments to maintain reserve.....	289,435	184,238	146,057	271,827	540,832
Legislation—					
House of Commons.....	2,209,580	985,992	1,796,121	1,485,515	1,759,641
Library of Parliament.....	65,352	69,137	71,300	75,962	74,994
Senate.....	747,294	285,694	490,696	491,076	587,326
General.....	80,854	62,069	95,000	54,577	72,817
Dominion Franchise Office.....	—	—	1,545,283	498,208	52,593
Chief Electoral Office, including elections.....	56,446	31,544	146,220	1,089,464	71,820
Mines and Resources—					
Immigration and Colonization.....	1,688,906	1,374,263	1,268,788	1,322,218	1,312,835
Indian Affairs.....	4,499,145	4,380,273	4,361,733	4,868,609	4,903,880
Interior.....	3,503,321	2,856,583	2,749,828	2,938,997	2,887,354
Mines and Geological Survey.....	1,048,701	909,141	964,869	1,040,346	1,134,714
Movement of Coal and Domestic Fuel Act.....	1,219,818	2,771,787	2,123,971	2,102,631	2,276,735
National Defence—					
Militia Service.....	8,718,881	8,773,545	8,852,632	10,141,230	11,345,751
Naval Service.....	2,167,328	2,171,423	2,222,003	2,380,018	4,763,294
Air Service.....	1,731,219	1,684,562	2,258,142	3,777,320	5,821,824
General Services.....	1,132,887	847,332	847,017	878,506	992,224
National Revenue (including Income Tax).....	10,846,109	10,359,966	10,165,641	10,962,988	11,205,101
Pensions, war, military, and civil.....	44,634,727	43,436,330	43,786,375	43,337,096	43,356,180
Pensions and National Health.....	11,434,268	10,372,480	10,936,574	12,053,582	12,452,392
Post Office.....	31,607,404	30,553,768	30,252,310	31,437,719	31,906,272
Privy Council.....	47,259	49,112	46,343	45,802	45,488
Public Archives.....	174,221	156,842	208,719	164,953	160,362
Public Printing and Stationery.....	231,263	172,476	367,744	168,697	169,367
Public Works.....	13,108,013	10,827,171	9,904,494	12,945,277	14,518,757
Royal Canadian Mounted Police.....	5,625,659	5,315,327	5,744,326	5,929,815	5,634,760
Secretary of State.....	605,704	386,616	394,963	704,972	654,705
Soldier Settlement.....	818,325	810,420	746,127	761,721	805,945
Trade and Commerce—					
Mail subsidies and steamship subventions.....	2,081,818	2,220,661	2,274,255	2,426,484	2,119,915
Canada Grain Act.....	2,026,412	1,759,183	1,679,236	1,848,251	1,738,585
Other departmental expenditures.....	3,275,381	3,006,685	3,057,023	3,458,235	5,522,518
Transport—					
Marine.....	5,802,147	5,438,746	5,742,429	5,857,428	5,614,342
Canadian Broadcasting Corporation.....	149,297	1,024,892	1,248,923	1,500,000	878,174
Railways and canals.....	3,684,028	3,315,333	4,581,444	4,250,138	4,019,131
Maritime Freight Rates Act.....	1,922,073	1,989,130	2,529,394	2,348,399	2,505,823
Railway Grade Crossing Fund.....	317,588	310,075	274,820	127,719	53,966
Totals, Ordinary Expenditures...	354,643,201	351,771,161	359,700,909	372,539,149	387,112,072
Capital Expenditures—					
Canals.....	3,156,328	1,986,140	337,907	457,926	51,945
Railways.....	1,658,812	754,194	625,772	286,887	203,035
Public Works.....	4,233,789	3,839,751	6,243,737	5,799,341	3,236,564
Totals, Capital Expenditures....	9,048,929	6,580,085	7,107,416	6,544,154	3,491,544

3.—Details of Expenditures, fiscal years ended Mar. 31, 1933-37—concluded.

Item.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
Special Expenditures—					
Unemployment Relief Act, 1930.....	548,399	4,155	2,500	26,338	1
Unemployment Relief Act, 1931.....	17,047,816	563,876	52,243	26,173	
Unemployment Relief Act, 1932.....	19,124,720	6,948,192	398,928	111,071	
Unemployment Relief Act, 1933.....	—	28,382,089	2,419,952	493,416	
Unemployment Relief Act, 1934.....	—	—	49,113,684	1,151,357	
Unemployment Relief Act, 1935.....	—	—	—	48,027,323	
Public Works Construction Acts.....	—	—	8,672,549	29,580,578	
Unemployment Relief and Assistance Act, 1936.....	—	—	—	—	45,698,788
Grants-in-aid to provinces.....	—	—	—	—	28,029,774
Dominion's share of joint Dominion-Provincial projects.....	—	—	—	—	12,691,397
Transportation facilities into mining areas.....	—	—	—	—	1,221,227
Railway maintenance.....	—	—	—	—	2,662,084
Administration.....	—	—	—	—	194,306
Dominion projects as provided by Special Supplementary Estimates.....	—	—	—	—	23,553,924
Special drought area relief.....	—	—	—	—	8,750,990
Wheat bonus.....	1,811,472	—	—	—	—
1930 Wheat Crop Equalization Payments Act.....	—	—	—	6,600,000	—
Loss on 1930 Wheat Pool and stabilization operations, payment to Canadian Wheat Board of net liabilities assumed Dec. 2, 1935.....	—	—	—	15,856,645	—
Loss on 1930 Oats Pool under guarantee of bank advances to Canadian Co-operative Wheat Producers Limited	—	—	—	174,383	—
Totals, Special Expenditures....	38,532,407	35,898,312	60,659,856	102,047,284	78,003,702
Government-Owned Enterprises—					
Losses Charged to Consolidated Revenue Fund—					
Canadian National Railways.....	62,139,413	58,955,388	48,407,901	47,421,465	43,303,394
Canadian National Steamships.....	—	—	—	269,969	—
Harbour Commissions.....	—	—	—	1,126,056	249,718
Loans and Advances (Non-Active)—					
Canadian National Steamships.....	Cr. 1,382,503	Cr. 14,064	487,167	Cr. 332,664	Cr. 1,753,779
Harbour Commissions.....	4,897,314	2,109,837	1,241,733	2,455,576	2,419,193
Write-down of Active Assets to Non-Active Assets—					
Canadian National Railways.....	41,121,216	—	—	—	—
Harbour Commissions.....	21,817,023	—	—	—	—
Totals, Government-Owned Enterprises.....	128,592,463	61,051,161	50,136,801	50,940,402	44,218,526
Other Charges—					
Write-down of Assets Chargeable to Consolidated Fund—					
Reduction in soldier and general land settlement loans.....	773	1,766,083	468,916	487,642	627,663
Yearly established losses in seed grain and relief accounts.....	104,944	91,003	21,275	26,924	44,425
Cancellation of Canadian Farm Loan Board capital stock.....	—	—	—	—	20,385
Write-down of Active Assets to Non-Active Assets—					
Province of Manitoba treasury bills..	—	—	—	—	804,897
Province of Saskatchewan treasury bills.....	—	—	—	—	17,682,158
Soldier and general land settlement non-active account—adjustment....	—	—	—	—	60
Non-Active Accounts—					
Canadian Pacific Railway advances (Relief Acts).....	1,447,223	1,000,000	—	—	—
Miscellaneous.....	—	100	200	—	—
Account previously carried as active asset transferred to non-active.....	—	—	11,208	—	—
Totals, Other Charges.....	1,552,940	2,857,186	501,599	514,566	19,179,588
Grand Totals, Expenditures	532,369,940	458,157,905	478,106,581	532,585,555	532,005,432

¹ Relief expenditures for 1937 were continued under the Unemployment Relief and Assistance Act, 1936, and other items shown immediately following.

4.—Principal Items of Dominion Expenditure, 1868-1937 (continued on pp. 846-847).

NOTE.—From 1868 to 1906, inclusive, the fiscal years ended on June 30; after 1906, on Mar. 31.

Fiscal Year.	Consolidated Fund.							Total Expenditure Chargeable to Consolidated Fund. ³
	Interest on Debt.	Charges of Management, Premium, Discount and Exchange.	Pensions, War and Military.	Public Works.	Railways and Canals. ¹	Subsidies to Provinces.	Post Office. ²	
	\$	\$	\$	\$	\$	\$	\$	\$
1868...	4,501,568	359,190	56,422	126,270	581,503	2,753,966	616,802	13,486,093
1869...	4,907,014	465,657	50,564	65,013	641,814	2,604,050	787,886	14,038,084
1870...	5,047,054	339,999	53,586	120,031	745,070	2,588,605	808,623	14,345,510
1871...	5,165,304	426,655	52,611	597,275	752,772	2,624,940	815,471	15,623,082
1872...	5,257,231	146,413	62,251	849,786	913,236	2,930,113	929,609	17,589,469
1873...	5,209,206	375,644	49,204	1,297,999	1,378,164	2,921,400	1,067,866	19,174,648
1874...	5,724,436	264,685	56,544	1,778,916	2,260,820	3,752,757	1,387,270	23,316,317
1875...	6,590,790	227,201	63,657	1,756,010	1,981,893	3,750,962	1,520,861	23,713,071
1876...	6,400,902	208,149	110,201	1,948,242	1,897,283	3,690,355	1,622,827	24,488,372
1877...	6,797,227	207,875	112,531	1,262,823	2,239,346	3,655,851	1,705,312	23,519,302
1878...	7,048,884	192,087	105,842	997,470	2,374,314	3,472,808	1,724,939	23,503,158
1879...	7,194,734	277,923	107,795	1,013,023	2,570,361	3,442,764	1,784,424	24,455,382
1880...	7,773,869	289,085	192,889	1,046,342	2,264,456	3,430,846	1,818,271	24,850,634
1881...	7,594,145	225,444	96,389	1,108,815	2,603,717	3,455,518	1,876,658	25,502,454
1882...	7,740,804	195,044	101,197	1,342,000	2,755,833	3,530,999	1,980,567	27,067,104
1883...	7,668,552	234,170	98,446	1,765,256	3,117,465	3,606,673	2,176,089	28,730,157
1884...	7,700,181	229,906	95,543	2,908,852	3,122,103	3,603,714	2,312,965	31,107,706
1885...	9,419,482	387,495	89,879	2,302,363	3,268,222	3,959,327	2,488,315	35,037,060
1886...	10,137,009	346,921	88,319	2,046,552	3,339,670	4,182,526	2,763,186	39,011,612
1887...	9,682,929	287,742	102,109	2,133,316	3,673,894	4,169,341	2,818,907	35,657,680
1888...	9,823,133	343,592	120,334	2,162,116	4,160,332	4,188,514	2,889,729	36,718,495
1889...	10,148,932	273,590	116,030	2,299,231	4,095,301	4,051,428	2,982,321	36,917,835
1890...	9,656,841	230,409	107,391	1,972,501	4,362,200	3,904,922	3,074,470	35,994,031
1891...	9,584,137	262,068	103,850	1,937,546	4,505,516	3,903,757	3,161,676	36,343,568
1892...	9,763,978	138,938	92,457	1,627,851	4,337,877	3,935,914	3,316,120	36,765,894
1893...	9,806,888	213,794	90,309	1,927,832	3,848,404	3,935,765	3,421,203	36,814,053
1894...	10,212,596	180,975	86,927	2,033,955	3,760,550	4,206,655	3,517,261	37,585,025
1895...	10,466,294	278,950	84,349	1,742,317	3,704,126	4,250,675	3,593,647	38,132,005
1896...	10,502,430	248,575	86,080	1,299,769	3,826,226	4,235,664	3,665,011	36,949,142
1897...	10,645,663	315,314	90,882	1,463,719	3,725,690	4,238,059	3,789,478	38,349,760
1898...	10,516,758	199,887	96,187	1,701,313	4,049,275	4,237,372	3,575,412	38,832,526
1899...	10,855,112	173,257	96,129	1,902,664	4,246,404	4,250,636	3,603,799	41,903,500
1900...	10,699,645	227,194	93,453	2,289,889	5,244,301	4,250,608	3,758,015	42,975,279
1901...	10,807,955	201,861	93,551	3,386,632	6,377,961	4,250,607	3,931,446	46,866,368
1902...	10,975,935	263,250	83,305	4,221,294	6,508,477	4,402,098	4,023,637	50,759,392
1903...	11,068,139	294,968	87,925	4,065,553	7,221,705	4,402,503	4,105,178	51,691,903
1904...	11,128,637	288,984	113,495	4,607,330	8,397,434	4,402,292	4,347,541	55,612,833
1905...	10,630,115	276,072	140,424	6,765,446	9,803,912	4,516,038	4,634,528	64,319,683
1906...	10,814,697	346,902	179,023	7,484,716	8,779,678	6,726,373	4,921,577	67,240,641
1907...	6,712,771	244,548	125,832	5,520,571	7,011,858	6,745,134	3,979,557	51,542,161
1908...	10,973,597	383,320	187,557	8,721,327	10,586,114	9,032,775	6,005,930	76,641,452
1909...	11,604,584	356,707	191,533	12,300,184	10,780,126	9,117,143	6,592,386	84,064,232
1910...	13,098,180	358,973	216,697	7,261,218	10,215,038	9,361,388	7,215,338	87,411,747
1911...	12,535,851	376,777	240,586	8,621,431	11,123,251	9,092,472	7,954,223	87,774,198
1912...	12,259,397	455,011	245,045	10,344,487	12,330,463	10,281,045	9,172,036	98,161,441
1913...	12,605,882	502,988	283,188	13,468,505	13,766,180	13,211,800	10,882,804	112,059,537
1914...	12,893,505	487,184	311,900	19,007,513	14,935,138	11,280,469	12,822,058	127,384,473
1915...	15,736,743	554,729	358,558	19,343,532	13,876,060	11,451,673	15,961,191	135,523,207
1916...	21,421,585	731,836	671,133	12,039,252	20,777,830	11,451,673	16,009,139	138,500,727
1917...	35,802,567	496,387	2,814,546	8,633,096	27,124,004	11,469,148	16,300,579	148,599,343
1918...	47,845,585	488,712	8,155,691	7,432,901	34,849,608	11,369,148	18,046,558	178,284,313
1919...	77,431,432	1,305,676	18,282,440	6,295,060	45,494,584	11,327,236	19,273,758	232,731,283
1920...	107,527,089	1,462,658	26,004,461	9,016,246	8,418,024	10,490,860	20,774,312	303,843,930
1921...	139,551,520	1,102,088	37,420,751	10,846,875	8,886,458	11,490,860	22,696,561	361,118,145
1922...	135,247,849	4,109,601	36,153,031	10,574,364	8,624,094	12,211,924	28,121,425	347,560,691
1923...	137,892,735	1,003,068	32,985,998	9,978,440	7,691,261	12,207,313	27,794,502	332,293,732
1924...	136,237,872	993,907	33,411,081	11,900,847	2,126,803	12,386,136	28,305,941	324,813,190
1925...	134,789,004	849,694	34,888,665	12,029,578	1,996,152	12,281,391	29,873,802	318,891,901
1926...	130,691,493	884,388	37,203,700	13,416,045	2,120,223	12,375,128	30,499,686	320,660,479
1927...	129,675,367	987,265	37,902,939	11,178,054	2,152,015	12,516,740	31,007,698	319,548,173
1928...	128,902,945	926,765	39,778,130	14,037,366	2,535,361	12,516,740	31,782,968	336,167,961
1929...	124,989,950	990,617	41,487,323	17,003,254	2,405,272	12,553,724	33,483,058	350,952,924
1930...	121,566,213	1,088,742	40,406,565	18,134,359	2,459,990	12,496,958	35,036,629	357,779,794
1931...	121,289,844	939,613	45,965,723	23,763,284	2,911,080	17,435,736	36,292,604	389,558,289
1932...	121,151,066	4,492,509	48,686,339	16,099,739	2,708,898	13,694,970	34,448,986	375,403,344
1933...	134,999,109	870,760	45,078,919	11,778,684	2,516,911	13,677,384	30,142,827	358,528,270
1934...	139,725,417	874,633	43,883,132	9,666,573	2,300,999	13,727,565	29,202,730	346,648,546
1935...	138,533,202	978,745	44,235,805	8,726,385	2,344,508	13,768,953	28,974,317	354,368,220
1936...	134,549,169	284,003	43,337,096	11,718,877	2,718,190	13,768,953	29,479,574	372,539,149
1937...	137,410,345	595,994	43,356,180	13,346,345	2,645,196	13,735,196	30,538,575	387,112,072

¹ Expenditure (Collection of Revenue). After 1919 railway receipts were applied directly to railway expenditure; this accounts for the great decline in the figures in 1920 and subsequent years. ² The expenditures shown do not include moneys spent for Civil Government account and miscellaneous expenditures and to this extent do not correspond with the Post Office figures shown in Table 3 for the years 1932-37.

³ Includes various non-enumerated items. ⁴ Nine months.

4.—Principal Items of Dominion

NOTE.—Dashes in this table indicate that there were no expenditures under the

Fiscal Year.	Capital Expenditure.								
	Canals.	Canadian Pacific Railway.	Debts Allowed to Provinces.	Dominion Lands.	Inter-colonial, etc. Miscellaneous.	Public Works, Miscellaneous.	Hudson Bay Railway.	National Transcontinental Rly., Incl. Quebec Bridge.	Prince Edward Island Railway. ¹
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1868..	51,498	—	—	—	455,250	41,690	—	—	—
1869..	130,142	—	—	—	282,615	8,548	—	—	—
1870..	—	—	—	—	1,693,229	—	—	—	—
1871..	—	30,148	—	—	2,866,376	—	—	—	—
1872..	255,646	489,428	1,666,200	—	5,131,141	68,746	—	—	—
1873..	256,547	561,818	13,859,080	—	5,019,240	99,517	—	—	—
1874..	1,189,592	310,225	4,927,061	—	3,614,899	135,963	—	—	—
1875..	1,714,830	1,546,242	—	—	3,426,100	189,484	—	—	46,087
1876..	2,388,733	3,346,567	—	—	1,108,322	267,840	—	—	42,546
1877..	4,131,375	1,691,150	—	—	1,318,352	258,833	—	—	200,000
1878..	3,843,339	2,228,373	—	—	408,817	170,120	—	—	6,551
1879..	3,064,099	2,240,286	—	—	226,639	77,179	—	—	40,129
1880..	2,123,366	4,044,523	—	—	2,048,015	8,730	—	—	16,540
1881..	2,077,029	4,968,504	—	334,681	608,733	187,370	—	—	—
1882..	1,647,759	4,589,076	—	511,882	585,569	70,949	—	—	402
1883..	1,763,002	10,033,800	—	556,870	1,616,633	119,869	—	—	57,186
1884..	1,577,295	11,192,722	7,172,298	723,658	2,689,690	491,376	—	—	130,663
1885..	1,504,621	9,900,282	5,420	303,593	1,247,006	182,306	—	—	76,957
1886..	1,333,325	3,672,585	3,113,334	130,653	765,967	569,202	—	—	4,668
1887..	1,783,698	915,057	—	162,392	926,030	353,044	—	—	5,800
1888..	1,033,118	52,099	—	135,048	1,713,487	963,778	—	—	—
1889..	972,918	86,716	—	130,684	2,623,137	575,408	—	—	—
1890..	1,026,364	40,981	—	133,832	2,351,787	3,220,926	—	—	—
1891..	1,280,725	37,367	—	94,847	1,184,318	515,702	—	—	—
1892..	1,463,279	66,212	—	86,735	316,784	224,390	—	—	8,300
1893..	2,069,573	413,837	—	115,038	299,081	181,878	—	—	—
1894..	3,027,164	146,540	—	149,147	439,209	102,059	—	—	—
1895..	2,452,274	49,209	—	99,842	327,605	102,393	—	—	—
1896..	2,258,779	65,669	—	82,184	260,396	114,826	—	—	—
1897..	2,348,637	14,054	—	91,412	190,570	129,238	—	—	—
1898..	3,207,250	692	—	127,505	252,756	364,018	—	—	17,542
1899..	3,899,877	8,419	267,026	151,213	1,081,930	385,094	—	—	22,000
1900..	2,639,565	236	—	199,470	3,255,348	1,089,827	—	—	53,546
1901..	2,360,570	8,979	—	269,061	3,633,837	1,006,983	—	—	280,174
1902..	2,114,690	449	—	370,838	4,626,841	2,190,125	—	—	475,998
1903..	1,823,274	—	—	449,542	2,254,267	1,268,004	—	—	829,414
1904..	1,880,787	33,076	—	748,855	1,879,566	1,334,397	—	6,249	698,878
1905..	2,071,594	—	—	794,410	4,755,578 ²	1,642,042	—	778,491	591,413
1906..	1,552,121	—	—	599,780	3,765,171	2,359,528	—	1,841,270	496,125
1907 ⁴ ..	887,839	—	—	526,583	1,512,491 ⁵	1,797,871	—	5,537,867	91,210
1908..	1,723,156	600	—	768,244	4,369,738	2,969,049	—	18,910,253	390,962
1909..	1,873,868	939	—	797,747	3,874,480	2,832,295	92,428	31,317,132	561,207
1910..	1,650,707	—	—	785,157	1,273,409	4,514,606	53,043	19,868,064	206,397
1911..	2,349,475	2,918	—	55,508	763,833	4,742,717	184,150	23,715,549	94,321
1912..	2,560,938	—	—	—	1,710,449	4,116,385	159,632	22,264,130	128,042
1913..	2,259,642	—	—	—	2,406,988 ⁶	6,057,515	1,099,063	15,279,837	103,001
1914..	2,829,661	—	—	—	4,348,000	10,100,017	4,498,717	15,274,206	129,575
1915..	5,490,796	—	—	—	6,914,977	11,049,030	4,773,744	12,648,242	570,531
1916..	6,170,953	—	—	—	7,861,899	8,471,229	4,887,131	9,825,265	1,350,473
1917..	4,304,589	—	—	—	4,873,032	7,838,116	2,604,280	6,650,263	609,752
1918..	1,781,957	—	—	—	—	6,347,201	1,879,699	103,167	—
1919..	2,211,964	—	—	—	—	5,705,348	562,558	1,723,638	—
1920..	4,550,761	—	—	—	3,285,736	38,869,683	—235,608	527,480	—3,540 ⁷
1921..	5,450,006	—	—	—	731,018	27,559,809	30,036	20,164	—
1922..	4,482,610	—	—	—	9,649	10,431,699	34,770	—	97,000
1923..	4,995,184	—	—	—	59,950	3,411,510	27,803	—	—
1924..	6,747,395	—	—	—	—	3,804,427	207,872	—	196,418
1925..	10,619,903	—	—	—	—	6,030,320	—124,154	—	—
1926..	12,024,456	—	—	—	—	4,805,949	—2,484	—	—
1927..	13,845,689	—	—	—	—	2,920,670	2,823,905	—	—
1928..	13,762,905	71	—	—	—	3,281,097	3,554,503 ⁸	—	63,419 ⁹
1929..	13,164,582	—	—	—	—7,990,740	16,818,019	6,159,563	—	—
1930..	9,324,177	—	—	—	—25,856	6,573,530	6,472,214	—415	—
1931..	9,842,011	—	—	—	—277,535	12,009,276	4,139,690	8,877	—
1932..	3,298,951	—	—	—	—2,504	7,438,511	5,236,668	—59,185	—
1933..	3,026,931	—	—	—	—	4,018,420	1,635,395	—	—
1934..	1,975,073	—	—	—	—	3,778,293	737,028	—	—
1935..	331,522	—	—	—	—	6,188,584	432,028	4,874	—
1936..	443,970	—	—	—	—	5,793,371	279,780	—	—
1937..	51,945	—	—	—	—	3,236,564	203,035	—	—

¹ Included with Canadian Government Railways since the consolidation of the system. ² Including \$2,725,504 for the improvement of the St. Lawrence, spent during the previous years by Montreal Harbour Commission. ³ Including \$17,956, cost of new car for the Governor General. ⁴ Nine months. ⁵ Including \$38,583, cost of new car for the Governor General. ⁶ Including \$15,000, cost of new car for the Governor General. ⁷ Includes New Brunswick Railway.

Expenditure, 1868-1937—concluded.

corresponding heads because the items were not applicable in the years so indicated.

Capital Expenditure—concluded.				Other Expenditure.				Fiscal Year.
North-west Territories.	Militia.	Canadian Government Railways.	Total Capital Expenditure.	Railway Subsidies.	War and Demobilization.	Other Charges.	Total Expenditure.	
\$	\$	\$	\$	\$	\$	\$	\$	
-	-	-	548,438*	-	-	37,158	14,071,689	1868
19,113	-	-	440,418	-	-	429,663	14,908,166	1869
1,821,887	-	-	3,515,116	-	-	155,988	18,016,614	1870
773,872	-	-	3,670,396	-	-	-	19,293,478	1871
241,889	-	-	7,853,050	-	-	223,456	25,665,975	1872
63,239	-	-	19,859,441	-	-	5,719	39,039,808	1873
-	-	-	10,177,740	-	-	4,019	33,498,076	1874
-	-	-	6,922,743	-	-	2,253,097	32,888,911	1875
-	-	-	7,154,008	-	-	315,764	31,958,144	1876
-	-	-	7,599,710	-	-	1,388,984	32,507,996	1877
-	-	-	6,657,200	-	-	385,413	30,545,772	1878
-	-	-	5,648,332	-	-	676,225	30,779,939	1879
-	-	-	8,241,174	-	-	949,948	34,041,756	1880
-	-	-	8,176,317	-	-	117,772	33,796,543	1881
-	-	-	7,405,637	-	-	201,885	34,674,625	1882
-	-	-	14,147,360	-	-	21,369	42,898,886	1883
-	-	-	23,977,702	208,000	-	2,567,453	57,860,862	1884
-	-	-	13,220,185	403,245	-	502,587	49,163,078	1885
-	-	-	9,589,734	2,701,249	-	10,534,973	61,837,569	1886
293,918	-	-	4,439,939	1,406,533	-	-	41,504,152	1887
539,930	-	-	4,437,460	1,027,402	-	155,623	42,338,620	1888
31,448	-	-	4,420,313	846,722	-	1,333,328	43,518,198	1889
4,773	-	-	6,778,663*	1,678,196	-	44,947	41,770,333	1890
2,901	-	-	3,115,860	1,265,706	-	68,074	40,793,208	1891
-1,243	-	-	2,164,457	1,248,216	-	2,093,569	42,372,136	1892
8,911	-	-	3,088,318	811,394	-	139,963	40,853,728	1893
-1,149	-	-	3,862,970	1,229,885	-	330,354	43,008,234	1894
-833	-	-	3,030,490	1,310,549	-	399,294	42,872,338	1895
-543	1,000,000	-	3,781,311	3,228,746	-	137,185	44,096,384	1896
3,824	745,965	-	3,523,700	416,955	-	682,881	42,972,756	1897
-1,272	173,740	-	4,142,231	1,414,935	-	944,589	45,334,281	1898
-1,853	387,810	-	6,201,516	3,201,220	-	236,399	51,542,635	1899
-1,473	230,851	-	7,467,370	725,720	-	1,549,098	52,717,467	1900
-1,632	135,885	-	7,693,857	2,512,329	-	900,312	57,972,866	1901
-1,543	299,697	-	10,077,095	2,093,939	-	1,040,374	63,970,800	1902
-3,040	428,223	-	7,049,684	1,463,222	-	1,541,763	61,746,572	1903
-2,616	1,299,910	-	7,879,102	2,046,878	-	6,716,235	72,255,048	1904
-2,478	1,299,964	-	11,931,014	1,275,630	-	2,277,812	79,804,139	1905
-1,767	1,299,876	-	11,912,104	1,637,574	-	2,487,323	83,277,642	1906
-1,352	975,283	-	11,327,792	1,324,889	-	1,583,297	65,778,138	1907*
-911	1,297,905	-	30,428,996	2,037,629	-	3,470,603	112,578,680	1908
-1,045	1,243,072	-	42,592,122	1,785,887	-	4,999,283	133,441,524	1909
-650	1,299,970	-	29,655,703	2,048,097	-	4,280,227	115,395,774	1910
-33,688	-	-	30,813,767	1,284,892	-	2,988,393	122,861,250	1911
-	-	-	30,939,576	859,400	-	7,181,665	137,142,082	1912
-	-	-	27,206,046	4,935,507	-	255,787	144,456,878	1913
-	-	-	37,180,176	19,036,237	-	2,640,162	186,241,048	1914
-	-	-	41,447,320	5,191,507	60,750,476	5,186,016	248,098,526	1915
-	-	-	38,566,950	1,400,171	166,197,755	3,186,898	339,702,502	1916
-	-	-	26,880,032	959,584	306,483,815	15,275,345	498,203,118	1917
-	-	32,999,880	43,111,904	720,405	343,836,802	10,706,787	576,660,210	1918
-	-	14,827,758	25,031,266	43,805	446,519,440	-7,283,582	697,042,212	1919
-	-	22,307,366	69,301,878	334,845	346,612,955	19,995,313	786,031,611*	1920
-	-	6,221,774	40,012,807	-	16,997,544	492,048	528,302,513*	1921
-	-	1,239,605	16,295,333	-	1,544,250	301,518	463,528,389*	1922
-	-	1,313,022	9,807,469	-	4,464,760	4,042,931	434,735,277*	1923
-	-	-94,835	10,861,277	-1,523	446,083	7,902,759	370,589,247*	1924
-	-	24,442	16,550,511	-	506,931	3,953,433	351,169,803*	1925
-	-	-29,372	16,798,549	-	191,392	6,330,092	355,186,423*	1926
-	-	-31,562	19,558,703	-	64,485	7,814,977	358,556,751*	1927
-	-	-26,347	20,635,648	-	1,656,011	1,705,311	378,658,440*	1928
-	-	-5,342,149	22,809,275	-	-669,399	2,067,153	388,805,953*	1929
-	-	217,494	22,561,144	-	59,702	9,744,021	398,176,246*	1930
-	-	2,500,000	28,222,318	-	61,889	16,678,959	440,008,855*	1931
-	-	1,067,348	16,979,788	-	75,471	55,384,663	450,955,541*	1932
-	-	-132,592	8,548,155	-	51,499	96,732,786	531,760,983*	1933
-	-	-60	6,490,333	-	47,571	101,686,262	457,968,585*	1934
-	-	70,000	7,027,008	-	54,138	114,815,072	478,004,747*	1935
-	-	-	6,544,154 ¹⁰	-	11	153,502,252	532,585,555*	1936
-	-	-	3,491,544 ¹⁰	-	11	141,401,816	532,005,432*	1937

* Includes certain advances non-active which for the years 1933-37 are shown in Table 3, p. 844, and for earlier years are given at the foot of p. 893 of the 1934-35 Year Book.

on Hudson Bay Terminals, \$880,278.

1937 included in revenue receipts.

¹⁰ Refunds on capital account of \$27,033 in 1936 and \$616,069 in

¹¹ Included in ordinary expenditure.

5.—Principal Items of Receipts (Consolidated Fund) and Total Receipts, 1868-1937.

NOTE.—From 1868 to 1906, inclusive, the fiscal years ended on June 30; after 1906 on Mar. 31.

Fiscal Year.	Customs Duties.	Excise Duties.	War Tax Revenue. ¹	Total Revenue from Taxation.	Interest on Investments.	Post Office and Money Orders.	Total Revenue Receipts. ²
	\$	\$	\$	\$	\$	\$	\$
1868.....	8,578,380	3,002,588	—	11,700,681	174,073	525,692	13,687,928
1869.....	8,272,880	2,710,028	—	11,112,573	824,424	535,315	14,379,175
1870.....	9,334,213	3,619,623	—	13,087,882	383,956	573,566	15,539,657
1871.....	11,841,105	4,295,945	—	16,320,369	554,384	612,631	19,375,037
1872.....	12,787,982	4,735,652	—	17,715,552	488,042	692,375	20,714,814
1873.....	12,954,164	4,460,682	—	17,616,555	396,404	833,657	20,970,591
1874.....	14,325,193	5,594,904	—	20,129,185	610,863	1,139,973	24,507,653
1875.....	15,351,012	5,069,687	—	20,664,879	840,887	1,155,332	24,649,724
1876.....	12,823,838	5,563,487	—	18,614,415	798,906	1,102,540	22,592,055
1877.....	12,546,988	4,941,898	—	17,697,925	717,684	1,114,946	22,927,761
1878.....	12,782,824	4,858,672	—	17,841,938	791,758	1,207,790	22,406,257
1879.....	12,900,659	5,390,763	—	18,476,613	592,500	1,172,418	27,020,525
1880.....	14,071,343	4,232,428	—	18,479,577	834,793	1,252,498	23,364,547
1881.....	18,406,092	5,343,022	—	23,942,139	751,513	1,352,110	29,635,298
1882.....	21,581,570	5,884,860	—	27,549,047	914,009	1,587,888	35,182,549
1883.....	23,009,582	6,260,117	—	29,269,699	1,001,193	1,800,391	36,803,669
1884.....	20,023,890	5,459,309	—	25,483,199	986,698	1,755,674	32,815,226
1885.....	18,935,428	6,449,101	—	25,384,529	1,997,035	1,841,372	33,354,041
1886.....	19,362,308	5,852,905	—	25,215,213	2,299,079	1,901,690	33,479,883
1887.....	22,373,951	6,308,201	—	28,682,152	990,887	2,020,624	35,775,531
1888.....	22,091,682	6,071,487	—	28,163,169	932,025	2,379,242	35,908,464
1889.....	23,699,413	6,886,739	—	30,586,152	1,305,392	2,220,504	38,782,870
1890.....	23,913,546	7,618,118	—	31,531,664	1,082,271	2,357,359	39,879,925
1891.....	23,305,218	6,914,850	—	30,220,068	1,077,228	2,515,823	38,579,311
1892.....	20,361,382	7,945,098	—	28,306,480	1,086,429	2,652,746	36,921,872
1893.....	20,910,662	8,367,364	—	29,278,026	1,150,167	2,773,508	38,208,609
1894.....	19,119,030	8,381,089	—	27,500,119	1,217,809	2,809,341	36,374,883
1895.....	17,585,741	7,805,733	—	25,391,474	1,336,047	2,792,790	33,978,129
1896.....	19,766,741	7,926,006	—	27,692,747	1,370,001	2,964,014	36,618,591
1897.....	19,386,278	9,170,379	—	28,556,657	1,443,004	3,202,938	37,829,778
1898.....	21,622,789	7,871,563	—	29,494,352	1,513,455	3,527,810	40,556,510
1899.....	25,150,745	9,641,227	—	34,791,972	1,590,448	3,193,778	46,743,103
1900.....	28,219,458	9,868,075	—	38,087,533	1,683,051	3,205,535	51,031,467
1901.....	28,293,930	10,318,266	—	38,612,196	1,784,834	3,441,505	52,516,333
1902.....	31,916,394	11,197,134	—	43,113,528	1,892,224	3,918,416	58,052,333
1903.....	36,738,033	12,013,779	—	48,751,812	2,020,953	4,397,833	69,348,084
1904.....	40,461,591	12,958,708	—	53,420,299	2,236,256	4,652,325	70,679,251
1905.....	41,437,569	12,586,475	—	54,020,124	2,105,031	5,125,373	71,186,072
1906.....	46,053,377	14,010,220	—	60,063,597	2,140,312	5,933,343	80,141,394
1907 ³	39,717,079	11,805,413	—	51,522,492	1,235,746	5,061,728	67,972,110
1908.....	57,200,276	15,782,152	—	72,982,428	1,925,569	7,107,887	96,055,417
1909.....	47,088,444	14,937,768	—	62,026,212	2,256,643	7,401,624	85,549,540
1910.....	59,767,681	15,253,353	—	75,021,034	2,807,465	7,958,548	101,616,476
1911.....	71,838,089	16,869,837	—	88,707,926	1,668,773	9,146,952	117,884,328
1912.....	85,051,872	19,261,662	—	104,313,534	1,281,317	10,492,394	136,108,217
1913.....	111,764,699	21,447,445	—	133,212,144	1,430,511	12,051,729	168,690,427
1914.....	104,691,238	21,452,037	—	126,143,275	1,964,541	12,954,530	163,174,395
1915.....	75,941,220	21,479,731	98,057 ⁴	97,519,008	2,980,247	13,046,665	133,073,482
1916.....	98,649,409	22,428,492	3,620,782	124,666,969	3,358,210	18,858,699	172,149,394
1917.....	134,043,842	24,412,348	16,302,238	174,758,428	3,094,012	20,902,384	232,701,294
1918.....	144,172,630	27,168,445	25,379,901	196,720,976	4,466,724	21,345,394	260,778,953
1919.....	147,169,188	30,342,034	56,177,508	233,688,730	7,421,002	21,603,542	312,946,747
1920.....	168,796,823	42,698,083	82,079,801	293,574,707	17,086,981	24,471,709	349,746,335
1921.....	163,766,804	37,118,367	168,385,327	368,770,498	24,815,246	26,706,198	436,292,184
1922.....	105,686,645	36,755,207	177,484,161	319,926,013	21,961,513	26,402,299	382,271,571
1923.....	118,056,469	35,761,997	181,634,875	335,453,341	16,465,303	29,016,771	403,094,210
1924.....	121,500,799	38,181,747	182,036,261	341,718,807	11,916,479	28,865,374	406,581,318
1925.....	108,146,871	38,603,489	147,164,158	293,914,518	11,332,328	28,752,535	351,515,392
1926.....	127,355,144	42,923,549	157,296,320	327,575,013	8,535,086	30,334,575	382,893,009
1927.....	141,968,678	48,513,160	156,167,434	346,649,272	8,559,401	29,069,169	400,452,480
1928.....	156,985,818	57,400,898	150,319,087	364,705,803	10,937,822	31,562,580	429,642,577
1929.....	187,206,332	63,684,954	145,029,742	395,921,028	12,227,562	30,611,964	460,151,841
1930.....	179,429,920	65,035,701	134,086,005	378,551,626	13,518,205	33,345,385	445,916,992
1931.....	131,208,955	57,746,086	107,320,633	296,276,396	10,421,224	30,212,326	356,160,876
1932.....	104,132,677	48,654,862	122,266,064	275,053,603	9,330,125	32,234,946	336,721,305
1933.....	70,072,932	37,833,858	146,412,011	254,318,801	11,220,989	30,928,317	311,126,329
1934.....	66,305,356	35,494,220	170,051,973	271,851,649	11,148,231	30,893,157	324,471,271
1935.....	76,561,975	43,189,655	181,118,715	304,443,729	10,963,478	31,248,324	361,871,929
1936.....	74,004,560	44,409,797	197,484,627	317,311,809	10,614,125	32,507,889	372,595,996
1937.....	83,771,091	45,956,857	256,822,921	386,550,869	11,231,035	34,274,552	454,153,747

¹ For detailed statements see Table 8, p. 851.
for most earlier years and special receipts since 1921.² Includes various smaller items of revenue receipts.³ Nine months.⁴ First year reported.

6.—Per Capita Figures of Taxation, Total Revenue Receipts, Expenditure on Consolidated Fund Account and Total Expenditure, 1868-1937.

NOTE.—The years marked with an asterisk (*) are those of the censuses, April 2, 1871; April 4, 1881; April 6, 1891; April 1, 1901; June 1, 1911, 1921 and 1931. For the intercensal years the populations are estimated as at June 1 (see p. 155 for estimates of population). See the tables on pp. 839-842 for the figures of revenue and expenditure on which this table is based.

Fiscal Year.	Per Capita.				Fiscal Year.	Per Capita.			
	Revenue from Taxation.	Total Revenue Receipts.	Expenditure on Consolidated Fund Acct.	Total Disbursements.		Revenue from Taxation.	Total Revenue Receipts.	Expenditure on Consolidated Fund Acct.	Total Disbursements.
	\$	\$	\$	\$		\$	\$	\$	\$
1868.....	3.33	3.90	3.84	4.01	1903.....	8.63	12.27	9.15	10.93
1869.....	3.12	4.03	3.94	4.18	1904.....	9.17	12.13	9.54	12.40
1870.....	3.61	4.29	3.96	4.97	1905.....	9.00	11.86	10.72	13.13
1871*.....	4.42	5.25	4.24	5.23	1906.....	9.69	12.93	10.85	13.44
1872.....	4.72	5.52	4.69	6.84	1907 ¹	8.31	10.60	8.32	10.61
1873.....	4.60	5.48	5.01	10.20	1908.....	11.02	14.50	11.57	16.99
1874.....	5.17	6.29	5.99	8.60	1909.....	9.12	12.58	12.36	19.62
1875.....	5.23	6.23	6.00	8.32	1910.....	10.74	14.54	11.36	16.51
1876.....	4.64	5.64	6.11	7.97	1911*.....	12.31	16.36	12.18	17.04
1877.....	4.35	5.64	5.79	8.00	1912.....	14.12	18.42	13.28	18.56
1878.....	4.33	5.44	5.70	7.41	1913.....	17.45	22.10	14.68	18.93
1879.....	4.41	6.46	5.84	7.35	1914.....	16.01	20.71	16.17	23.64
1880.....	4.34	5.49	5.84	8.00	1915.....	12.22	16.67	16.98	31.09
1881*.....	5.54	6.85	5.90	7.82	1916.....	15.58	21.52	16.29	42.46
1882.....	6.30	8.04	6.19	7.93	1917.....	21.68	28.87	18.44	61.81
1883.....	6.61	8.31	6.49	9.68	1918.....	24.14	32.01	21.88	70.77
1884.....	5.68	7.31	6.93	12.90	1919.....	23.12	37.65	28.00	83.87
1885.....	5.60	7.37	7.72	10.84	1920.....	34.31	40.88	35.51	91.87
1886.....	5.56	7.31	8.60	13.63	1921*.....	41.96	49.65	41.09	60.11
1887.....	6.20	7.73	7.71	8.97	1922.....	35.87	42.86	38.97	51.97
1888.....	6.02	7.68	7.85	9.63	1923.....	37.24	44.74	36.88	48.26
1889.....	6.47	8.20	7.81	9.20	1924.....	37.38	44.47	35.53	40.53
1890.....	6.60	8.34	7.53	8.74	1925.....	31.63	37.82	34.32	37.78
1891*.....	6.25	7.98	7.52	8.44	1926.....	34.66	40.51	33.93	37.59
1892.....	5.80	7.56	7.53	8.66	1927.....	35.98	41.56	33.17	37.21
1893.....	5.94	7.75	7.47	8.29	1928.....	37.09	43.69	34.19	38.51
1894.....	5.52	7.31	7.55	8.64	1929.....	39.49	45.88	35.00	38.78
1895.....	5.05	6.76	7.59	8.53	1930.....	37.09	43.68	35.06	39.01
1896.....	5.46	7.22	7.52	8.69	1931*.....	28.55	34.32	37.55	42.41
1897.....	5.58	7.39	7.49	8.40	1932.....	26.18	32.05	35.73	42.92
1898.....	5.70	7.84	7.50	8.76	1933.....	23.81	29.13	33.57	49.79
1899.....	6.65	8.93	8.00	9.85	1934.....	25.12	29.98	32.03	42.31
1900.....	7.18	9.63	8.11	9.94	1935.....	27.84	33.09	32.41	43.71
1901*.....	7.19	9.78	8.72	10.79	1936.....	23.77	33.79	33.78	48.29
1902.....	7.85	10.57	9.24	11.64	1937.....	34.76	40.84	34.81	47.84

¹ Nine months.

7.—Per Capita Revenue Receipts and Expenditures, by Principal Items, 1933-37.

NOTE.—See Table 2 on pp. 839-840 for the revenue receipts and Table 3 on pp. 840-842 for expenditures on which these per capita figures are based. Dashes in this table indicate that no revenue was collected or expenditures made under the corresponding heads because the items were not applicable in the years so indicated.

Item.	1933. \$	1934. \$	1935. \$	1936. \$	1937. \$
REVENUE RECEIPTS.					
Consolidated Fund Receipts—					
Taxation—					
Customs.....	6.56	6.13	7.00	6.71	7.53
Excise duties.....	3.54	3.28	3.95	4.02	4.13
War Tax Revenue—					
Banks.....	0.12	0.12	0.13	0.11	0.11
Insurance companies.....	0.08	0.07	0.07	0.07	0.07
Business profits.....	—	—	—	—	—
Income tax.....	5.81	5.67	6.11	7.49	9.21
Sales tax.....	5.32	5.67	6.63	7.03	10.15
Tax on cheques, transportation tax, etc.....	2.38	4.17	3.64	3.19	3.56
Tax on gold.....	—	—	0.33	0.13	—
Totals, Receipts from Taxation.....	23.81	25.11	27.86	28.75	34.76

¹ Less than one-half of one cent.

7.—Per Capita Revenue Receipts and Expenditures, by Principal Items, 1933-37— concluded.

Item.	1933. \$	1934. \$	1935. \$	1936. \$	1937. \$
REVENUE RECEIPTS.—Concluded.					
Consolidated Fund Receipts—concluded.					
Non-Tax Revenue—					
Canada Grain Act.....	0-14	0-11	0-11	0-11	0-11
Dominion lands.....	0-04	0-04	0-05	0-04	0-04
Interest on investments.....	1-05	1-03	1-27	0-96	1-01
Post Office.....	2-90	2-85	2-86	2-94	3-08
Premium, discount and exchange (net).....	0-01	—	0-07	¹	—
Radio licences.....	0-13	0-12	0-14	0-14	0-09
Totals, Non-Tax Revenue ²	4-90	4-82	4-94	4-98	5-26
Totals, Consolidated Fund Receipts.....	28-71	29-94	32-78	33-75	40-02
Special receipts and other credits.....	0-48	0-05	0-32	0-03	0-82
Grand Totals, Receipts.....	29-19	29-99	33-10	33-78	40-84
EXPENDITURES.					
Ordinary Expenditures—					
Agriculture.....	0-76	0-65	0-65	0-85	0-79
Finance—					
Interest on public debt.....	12-64	12-91	12-67	12-20	12-36
Subsidies to provinces.....	1-28	1-27	1-26	1-25	1-90
Old age pensions.....	1-08	1-14	1-37	1-52	1-90
Fisheries.....	0-17	0-15	0-15	0-15	0-15
Justice (including penitentiaries).....	0-50	0-47	0-46	0-44	0-44
Labour (including technical education and Government annuities).....	0-10	0-08	0-07	0-09	0-12
Mines and Resources—					
Immigration and Colonization.....	0-16	0-13	0-12	0-12	0-12
Indian Affairs.....	0-42	0-40	0-40	0-44	0-44
Interior.....	0-33	0-26	0-25	0-27	0-28
Mines and Geological Survey.....	0-10	0-08	0-09	0-09	0-10
Movement of Coal and Domestic Fuel Act.....	0-11	0-26	0-19	0-19	0-20
National Defence.....	1-29	1-25	1-30	1-56	2-06
National Revenue (including Income Tax).....	1-02	0-96	0-93	0-99	1-01
Pensions, war, military, and civil.....	4-18	4-01	4-00	3-93	3-90
Pensions and National Health.....	1-07	0-96	1-00	1-09	1-12
Post Office.....	2-96	2-82	2-77	2-85	2-87
Public Works.....	1-23	1-00	0-91	1-17	1-31
Royal Canadian Mounted Police.....	0-53	0-49	0-53	0-54	0-51
Trade and Commerce.....	0-69	0-65	0-64	0-70	0-84
Transport—					
Marine.....	0-54	0-50	0-53	0-53	0-50
Canadian Broadcasting Corporation.....	0-01	0-09	0-11	0-14	0-08
Railways and Canals (including Maritime Freight Rates Act and Railway Grade Crossing Fund).....	0-55	0-52	0-68	0-61	0-59
Totals, Ordinary Expenditures².....	33-20	32-50	32-89	33-78	34-81
Totals, Capital Expenditures.....	0-85	0-61	0-65	0-59	0-31
Totals, Special Expenditures.....	3-61	3-32	5-55	9-25	7-01
Government-Owned Enterprises.....	12-04	5-64	4-58	4-62	3-98
Other Expenditures.....	0-14	0-26	0-05	0-05	1-73
Grand Totals, Expenditures.....	49-84	42-33	43-72	48-29	47-84

¹ Less than one-half of one cent.² Includes other items not specified.

Subsection 3.—War Tax Revenue.

An account of the various war taxes imposed in 1915 and subsequently has already been given on p. 835 in the introduction to this Section. For convenience of reference, the amounts received from these taxes since the beginning are segregated and the totals paid to the Receiver General are given in Table 8. The taxes imposed on banks, trust and loan companies, and insurance companies are collected by the Department of Finance. The excise war taxes, the business profits war tax and the income war tax are collected by the Department of National Revenue. The amounts of excise war taxes collected from different sources in the past six fiscal years are given in Table 9, while Table 10 contains the details by provinces for the latest year. (See also Tables 37 to 42 of this Chapter.)

8.—War Tax Revenues Received by the Receiver General, fiscal years ended Mar. 31, 1915-37.

NOTE.—Dashes in this table indicate that no revenue was collected under the corresponding heads because the items were not applicable in the years indicated.

Fiscal Year.	Banks. ¹	Trust and Loan Companies. ¹	Insurance Companies. ¹	Business Profits. ²	Income Tax.	Sales, Transportation Tax, etc.	Total War Tax Revenue.
	\$	\$	\$	\$	\$	\$	\$
1915	—	—	—	—	—	98,057	98,057
1916	1,300,447	324,250	459,247	—	—	1,536,838	3,620,782
1917	1,114,023	202,415	419,699	12,506,517	—	2,059,584	16,302,238
1918	1,115,758	269,129	496,540	21,271,084	—	2,227,390	25,379,901
1919	1,099,764	323,340	546,114	32,970,062	9,349,720	11,888,508	56,177,508
1920	1,170,223	274,216	638,731	44,145,184	20,263,740	15,587,707	82,079,801
1921	1,257,534	293,802	807,667	40,841,401	46,381,824	78,803,099	168,385,327
1922	1,293,697	283,994	749,959	22,815,667	78,684,355	73,656,489	177,484,161
1923	1,244,437	312,392	852,328	13,031,462	59,711,538	106,482,718	181,634,875
1924	1,236,957	308,652	857,587	4,752,681	54,204,028	120,676,376	182,036,261
1925	1,217,754	315,315	867,992	2,704,427	56,248,043	85,810,717	147,164,153
1926	1,176,869	326,714	950,221	1,173,449	55,571,962	98,097,106	157,296,321
1927	1,174,665	335,368	947,830	710,102	47,386,309	105,613,160	156,167,434
1928	1,224,645	345,430	999,003	956,031	56,571,047	90,222,931	150,319,087
1929	1,242,399	7,641	894,864	455,232	59,422,323	83,007,283	145,029,742
1930	1,408,420	—	74,416	173,300	69,020,726	63,409,143	134,086,005
1931	1,429,264	6	74,250	34,430	71,048,022	34,734,661	107,320,633
1932	1,390,121	—	12,152	3,000	61,254,400	59,606,391	122,266,064
1933	1,327,535	—	826,150	54	62,066,697	82,191,575	146,412,011
1934	1,335,546	—	741,681	—	61,399,171	106,575,575	170,051,973
1935	1,368,480	—	750,100	—	66,808,066	112,192,069	181,118,715
1936	1,280,933	—	760,843	—	82,709,803	112,733,048	197,484,627
1937	1,209,894	—	774,363	—	102,365,242	152,473,422	256,822,921
Totals	27,619,365	3,922,644	14,501,647	198,544,083	1,120,467,016	1,599,683,847	2,964,738,602

¹ The figures are for special taxation only, imposed in 1915 as outlined on p. 835. "Insurance Companies" are exclusive of life and marine insurance companies.

² Although this tax was not charged upon profits accruing after Dec. 31, 1920 (see 14-15 Geo. V, c. 10), belated revenue therefrom continued to be received until 1933.

9.—Summary of Excise War Taxes Collected by the Department of National Revenue, fiscal years ended Mar. 31, 1932-37.

(Accrued Revenue.)

NOTE.—Dashes in this table indicate that no revenue was collected under the corresponding heads because the items were not applicable in the years so indicated.

Item.	1932.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$	\$
Licences	37,127	42,366	42,506	48,576	41,872	44,734
Stamps	2,852,913	3,276,618	4,438,833	4,419,907	4,404,764	5,543,480
Matches	1,949,470	1,659,907	1,672,390	1,457,117	1,566,896	1,496,195
Automobiles	352,668	220,328	855,490	1,241,918	1,261,918	1,317,561
Playing cards	276,528	206,020	240,488	244,000	273,090	222,500
Toilet preparations	—	—	862,119	1,051,997	1,078,376	1,112,021
Cigars	217,938	153,677	120,469	120,795	124,837	121,106
Wines	258,061	195,369	213,631	248,425	203,466	207,191
Ale, beer and porter	6,297,859	4,972,604	4,718,307	1,773,712	—	—
Malt products	—	—	209,332	64,225	—	—
Sugar	—	—	14,122,564	10,679,488	10,037,792	10,306,171
Transportation and telephones	—	1,031,657	1,375,046	1,463,203	1,460,952	1,582,223
Embossed cheques (Departmental)	194,372	115,711	201,395	216,834	229,511	252,899
Lighters	—	—	—	—	13,831	26,273
Penalties and interest	219,032	91,073	142,328	84,588	85,672	103,764
Sales, domestic	34,557,788	49,275,963	54,244,032	64,011,591	70,259,941	99,421,015
Domestic Totals	47,193,756	61,241,293	83,458,830	87,126,375	91,052,968	121,757,133
Importations—						
Sales	7,834,822	8,701,609	8,979,576	10,432,314	10,918,243	16,717,786
Excise	253,505	34,707	1,434,656	1,510,296	1,561,268	1,889,731
Special excise 3 p.c. ¹	4,982,217	13,377,726	14,534,620	15,007,274	12,938,182	15,415,315
Grand Totals, Excise Taxes	60,264,300²	83,353,335²	108,407,782²	111,076,259²	116,471,661²	155,779,965²

¹ 1 p.c. in 1932. ² Includes refunds of \$657,909 in 1932, \$1,163,759 in 1933, \$1,832,208 in 1934, \$2,352,789 in 1935, \$3,270,014 in 1936 and \$3,306,541 in 1937.

10.—Excise War Taxes Collected by the Department of National Revenue, by Provinces, fiscal year ended Mar. 31, 1937.

NOTE.—Dashes in this table indicate that no revenue was collected under the corresponding heads because the items were not applicable in the cases indicated.

Province or Other Source.	Licences.	Stamps.	Matches.	Automobiles.	Sales, Domestic.	Toilet Preparations.	Playing Cards.
	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	96	13,214	—	—	33,373	—	—
Nova Scotia.....	997	111,722	—	757	1,285,821	31	—
New Brunswick.....	808	81,950	—	4,384	904,770	41	—
Quebec.....	15,078	1,660,482	807,045	119,417	33,033,858	294,175	75,000
Ontario.....	19,690	2,786,349	689,150	1,185,106	55,331,962	774,567	147,500
Manitoba.....	1,746	230,202	—	1,236	2,999,994	34,783	—
Saskatchewan.....	608	126,683	—	69	733,110	589	—
Alberta.....	1,447	187,388	—	1,078	1,159,579	447	—
British Columbia.....	4,256	336,611	—	5,514	3,937,116	7,388	—
Yukon.....	8	2,063	—	—	1,422	—	—
Departmental sales.....	—	6,816	—	—	10	—	—
Totals.....	44,734	5,543,480	1,496,195	1,317,561	39,421,015	1,112,021	222,500

Province or Other Source.	Cigars.	Wines.	Sugar.	Embossed Cheques.	Transportation and Telephones.	Lighters.	Interest.
	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	—	—	—	—	—	—	42
Nova Scotia.....	—	—	1,124,158	—	28,385	—	1,929
New Brunswick.....	—	—	913,491	—	20,700	—	2,141
Quebec.....	84,078	23,482	2,438,075	—	989,486	1,986	46,729
Ontario.....	36,190	160,467	3,713,877	—	374,906	24,287	39,630
Manitoba.....	—	18	—	—	28,837	—	4,034
Saskatchewan.....	—	8,435	—	—	43,647	—	1,109
Alberta.....	—	—	466,096	—	49,720	—	2,019
British Columbia.....	838	14,789	1,650,474	—	46,492	—	6,131
Yukon.....	—	—	—	—	50	—	—
Departmental sales.....	—	—	—	252,899	—	—	—
Totals.....	121,106	207,191	10,306,171	252,899	1,582,223	26,273	103,764

Province or Other Source.	Domestic Total.	Importations.			Grand Total.
		Sales.	Excise.	Special Excise, 3 p.c.	
	\$	\$	\$	\$	\$
Prince Edward Island.....	46,725	24,795	279	6,809	78,608
Nova Scotia.....	2,553,800	366,539	5,422	301,154	3,226,915
New Brunswick.....	1,928,285	481,159	1,607	180,890	2,591,941
Quebec.....	39,588,890	4,431,561	1,399,857	4,086,978	49,507,285
Ontario.....	65,283,683	7,232,035	374,036	8,571,857	81,461,611
Manitoba.....	3,300,850	1,083,125	41,290	539,987	4,965,252
Saskatchewan.....	914,251	259,984	4,343	253,512	1,432,091
Alberta.....	1,867,773	567,035	10,101	348,760	2,793,669
British Columbia.....	6,009,608	2,239,602	52,671	1,114,972	9,416,853
Yukon.....	3,542	30,499	125	10,396	44,562
Departmental sales.....	259,726	—	—	—	259,726
British Post Office parcels.....	—	1,452	—	—	1,452
Totals.....	121,757,133	16,717,786	1,889,731	15,415,315	155,779,965

Subsection 4.—Inland Revenue.

Under the Inland Revenue Act (R.S.C., 1906, c. 5), the Department of Inland Revenue had the control and management of standard weights and measures and of the collection of excise duties, of stamp duties, internal taxes, bridge and ferry tolls and rents until 1918. It administered the statutes which dealt with the adulteration of food and other articles, electricity and gas inspection, patent medicines, petroleum, naphtha, and the analysis of fertilizers and feeding stuffs. This Department also established the food standards which were put into force by Orders in Council under the authority of Sec. 26 of the Adulteration Act. Later the

administration of the Adulteration of Food, and the Proprietary and Patent Medicine Acts was transferred to the Department of Health, that of the Commercial Feeding Stuffs, and Fertilizers Acts to the Department of Agriculture, and that of the Acts relating to weights and measures, and the inspection of gas, electric light, and water meters to the Department of Trade and Commerce. By Order in Council of May 18, 1918, the Departments of Customs and of Inland Revenue were combined as the Department of Customs and Inland Revenue, under one Minister of the Crown. On June 4, 1921, the Department of Customs and Inland Revenue was consolidated as the Department of Customs and Excise (11-12 Geo. V, c. 26). As from Apr. 1, 1927, the name of this Department, which collects the great bulk of the revenue of the Dominion, was changed to Department of National Revenue by authority of 17 Geo. V, c. 34. This Act provides for three chief departmental officers—the Commissioner of Customs, the Commissioner of Excise and the Commissioner of Income Tax, while an Assistant Commissioner of Customs may also be appointed.

In the fiscal year ended Mar. 31, 1937, the gross amount of customs duties collected by the Department was \$92,282,059, as compared with \$82,784,317 in 1936, \$84,627,473 in 1935, \$73,154,472 in 1934, \$77,271,965 in 1933, \$113,997,851 in 1932, and \$149,250,992 in 1931. The total of excise duties and excise war taxes collected in the fiscal year ended Mar. 31, 1937, was \$202,498,882, as compared with \$161,830,681 in 1936, \$158,576,297 in 1935, \$145,176,663 in 1934, \$123,478,841 in 1933, \$109,586,366 in 1932, and \$93,986,975 in 1931.* The total of income tax collected in the fiscal year ended Mar. 31, 1937, was \$102,365,242, as compared with \$82,709,803 in 1936. While the income tax and the business profits war tax (see Table 8) are collected by the Commissioner of Income Tax, the other main branches of inland revenue—the excise duties and excise war taxes—are collected by the Commissioner of Excise.

Canadian Excise Tariff.—The following is a statement of the Canadian excise tariff, as existing at Jan. 1, 1938:—

1. Spirits distilled in Canada, per proof gal. \$ 4-00	3. Beer or Malt Liquor:—
Canadian brandy, per proof gal. 3-00	(a) Brewed in whole or part from any substance other than malt, per gal. 0-22
Except Spirits as follows:—	(b) Imported (in addition to any of the duties otherwise imposed), per gal. 0-07
(a) Used in a bonded manufactory for medicines, extracts, etc., per proof gal. 1-50	4. Malt:—
(b) Used in a bonded manufactory for perfumes, per proof gal. 1-50	(a) Produced in Canada and screened, per lb. 0-06
(c) Used in a bonded manufactory for vinegar, per proof gal. 0-27	(b) Imported, per lb. 0-06
(d) Used for chemical compositions approved by Governor in Council, per proof gal. 0-15	(c) Imported, crushed or ground, per lb. 0-08
(e) Sold to licensed druggists for pharmaceutical preparations, per proof gal. 1-50	5. Malt Syrup:—
(f) Distilled from native fruits and used by a licensed wine manufacturer for fortification of native wines, per proof gal. Free	(a) Produced in Canada, per lb. 0-10
2. Spirits imported (in addition to any of the duties otherwise imposed), per proof gal. 0-30	(b) Imported, per lb. 0-16
	6. Tobacco, Cigars and Cigarettes:—
	(a) Manufactured tobacco, per lb. 0-20
	(b) Cigarettes weighing not more than 3 lb. per M, per M. 4-00
	(c) Cigarettes, weighing more than 3 lb., per M, per M. 11-00
	(d) Cigars, per M. 3-00

A drawback of 99 p.c. of the duty may be granted when domestic spirits, testing not less than 50 p.c. over proof, are delivered in limited quantities to universities, scientific or research laboratories, or to any *bona fide* public hospital for medicinal purposes only.

Revenue from Excise Duties.—The inland revenue collected from excise duties, other than war taxes, is shown by items for the past six fiscal years in Table 11.

*Table 9, p. 851, gives the details of the revenues from individual taxes for the years 1932-37 and Table 10, p. 852, gives this information by provinces for 1937.

Tobacco, including cigarettes, is shown by the figures to have supplied about 61 p.c. of the revenue from excise duties in the fiscal year 1937.

11.—Details of Excise Duties Collected, fiscal years ended Mar. 31, 1932-37.

(As shown in the Report of the Commissioner of Excise.)

NOTE.—Dashes in this table indicate that no revenue was collected under the corresponding heads because the items were not applicable in the years indicated.

Item.	1932.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$	\$
Spirits.....	8,153,448	7,201,375	7,176,513	8,155,162	7,401,581	8,316,669
Validation fee.....	—	—	323,482	443,550	600,417	1,055,719
Beer or malt liquor.....	385,436	302,539	234,877	1,143,910	408,760	390,277
Malt syrup.....	—	—	—	168,705	163,710	160,175
Malt.....	3,633,438	2,875,779	2,773,984	6,263,464	7,691,832	8,050,380
Tobacco.....	36,047,484	29,330,598	25,857,511	27,903,910	28,678,512	28,334,748
Cigars.....	456,654	368,352	347,803	376,136	373,668	372,058
Licences.....	45,605	44,863	54,710	45,201	40,540	38,891
Totals.....	49,322,065	40,123,506	36,768,880	44,500,038	45,359,020	46,718,917

Statistics of Licences and Distillation.—As a by-product of the collection of excise duties, statistics are compiled of excise licences issued and of distillation; figures for recent years are given in Table 12.

12.—Statistics of Distillation, fiscal years ended Mar. 31, 1932-37.

Schedule.	1932.	1933.	1934.	1935.	1936.	1937.
Licences issued..... No.	27	24	20	18	18	18
Licence fees..... \$	7,125	6,250	5,750	5,000	4,750	4,500
Grain, etc., for Distillation—						
Malt..... lb.	10,802,254	6,807,119	8,259,033	3,878,133	6,460,673	8,674,360
Indian corn..... “	19,657,775	17,871,546	27,497,313	22,508,624	32,961,102	52,575,085
Rye..... “	27,121,120	17,552,045	13,929,865	4,772,654	7,128,903	10,440,518
Other grain..... “	189,080	17,125	121,208	119,000	192,098	328,960
Totals, Grain Used..... “	57,770,229	42,247,835	49,807,419	31,278,411	46,742,776	72,018,923
Molasses used..... “	71,988,200	39,272,923	69,111,370	48,550,415	74,932,898	87,235,183
Wine and other materials..... “	15,917,061	3,071,695	1,525,833	2,387,528	304,531	2,247,560
Proof spirits manufactured..... proof gal.	7,099,637	4,345,834	6,411,230	4,321,457	6,553,190	8,723,005
Duty Collected Ex-manufactory on Deficiencies and Assessment—						
Amount..... proof gal.	9,643	575	297	80	664	678
Duty..... \$	87,061	5,187	2,076	559	2,655	2,942
Totals, duties collected plus licence fees..... \$	94,186	11,437	7,826	5,559	7,405	7,442

It will be seen from the above table that the quantity of spirits manufactured dropped between 1932 and 1933 from 7,099,637 proof gal. to 4,345,834 proof gal. Since 1933 there has been an increase to 8,723,005 proof gal. for 1937, although for the year 1935 the low figure of 4,321,457 was recorded. The duties collected ex-manufactory on deficiencies etc., plus licence fees fell from \$94,186 to \$5,559 between 1932 and 1935 but showed an improvement at \$7,442 for 1937.

Alcohol and Tobacco Taken out of Bond.—In Table 13 are shown the quantities of spirits, malt liquor, malt, cigars, cigarettes, and tobacco taken out of bond for consumption in the fiscal years ended 1911 to 1937.

Between 1920 and 1937 the number of cigars taken out of bond fell from 270,089,761 to 123,956,872 and the quantity of tobacco, which was 23,049,012 lb. in 1920, had fallen to 20,870,651 lb. by 1925, since when there was a steady increase

to 24,122,763 lb. in 1937. The consumption of cigarettes increased from 1,553,468,890 in 1919 to 5,082,314,590 in 1931 but thereafter showed a decline. After 1935, however, consumption reached new records.

Between 1923 and 1929 spirits taken out of bond (exclusive of imported spirits) rose from 729,678 gal. to 2,016,802 gal., but there was a decided and steady drop to 769,527 gal. for 1933. Since 1933 substantial increases have been shown. Malt liquor showed an increase from 36,789,195 gal. in 1923 to 65,719,129 gal. in 1929 but there was a decrease to 40,105,883 for 1934; the figure for 1937 was 59,920,298 gal.

13.—Quantities of Spirits, Malt Liquor, Malt, and Tobacco Taken out of Bond for Consumption, fiscal years ended Mar. 31, 1911-37.

NOTE.—For years prior to 1900, see 1916-17 Year Book, p. 528, and for 1901-10, see 1933 Year Book, p. 840.

Fiscal Year.	Spirits. ¹	Malt Liquor.	Malt.	Cigars.	Cigarettes.	Tobacco. ²
	gal.	gal.	lb.	No.	No.	lb.
1911.....	4,146,452	41,752,448	101,525,430	227,585,692	585,935,370	18,903,322
1912.....	4,562,382	47,518,647	114,029,523	252,718,242	732,663,841	21,419,046
1913.....	4,999,937	52,314,400	123,920,607	294,772,933	977,743,301	22,371,636
1914.....	4,762,618	56,060,846	133,794,639	288,219,892	1,166,023,170	22,248,760
1915.....	4,021,090	47,963,225	111,037,743	236,866,542	1,090,125,936	21,180,857
1916.....	3,629,324	39,638,877	89,476,590	207,647,808	1,082,324,710	20,698,241
1917.....	4,118,147	34,827,284	78,815,746	239,752,252	1,367,276,750	20,735,080
1918.....	4,591,972	28,442,427	59,626,049	254,445,945	1,664,709,933	21,780,168
1919.....	2,941,108	26,024,117	49,184,747	221,087,110	1,553,468,860	19,980,446
1920.....	3,816,124	36,863,867	69,975,631	270,089,761	2,440,982,912	23,049,012
1921.....	2,816,071	35,509,757	82,210,351	214,262,197	2,439,832,278	19,389,268
1922.....	730,474	38,404,346	87,561,176	181,255,533	2,450,397,154	20,528,228
1923.....	729,678	36,789,195	84,922,024	183,965,151	1,917,773,908	22,072,709
1924.....	899,291	43,717,823	105,446,169	198,042,909	2,420,052,731	21,172,307
1925.....	910,316	48,106,177	118,237,385	168,097,887	2,531,693,150	20,870,651
1926.....	1,082,785	52,443,505	127,789,729	174,363,188	2,883,448,160	21,595,483
1927.....	1,404,111	51,726,251	126,967,976	175,335,838	3,333,999,860	21,589,772
1928.....	1,896,357	58,391,360	142,543,947	181,730,614	3,927,022,325	21,907,747
1929.....	2,016,802	65,719,129	158,490,019	190,981,166	4,607,500,425	21,973,221
1930.....	1,926,063	62,992,156	149,746,711	196,251,957	5,035,878,655	22,195,455
1931.....	1,180,536	58,641,404	137,997,652	177,841,987	5,082,314,590	22,520,345
1932.....	781,612	52,001,768	121,257,234	152,159,301	4,401,628,765	22,801,035
1933.....	769,527	40,632,084	95,604,954	122,664,715	3,728,832,089	22,815,839
1934.....	933,946	40,105,883	92,319,768	115,988,080	4,342,728,835	22,315,265
1935.....	1,063,928	51,703,781	117,985,480	125,519,841	4,958,250,855	22,891,129
1936.....	1,621,286	56,913,069	128,204,424	124,570,870	5,310,132,016	23,113,501
1937.....	1,900,714	59,920,298	134,154,094	123,956,872	5,855,935,609	24,122,763

¹ Exclusive of imported spirits but inclusive of non-potable spirits down to 1921.

² Including snuff.

Subsection 5.—Subsidies and Loans to Provinces.

Subsidies.—By the provisions of the British North America Act and subsequent arrangements entered into from time to time, the Dominion is required to make certain annual payments to the individual provinces. These payments fall into the following classes:—

Interest on Debt Allowances.—By the terms of the Union of the provinces at Confederation in 1867, the Dominion assumed all the outstanding debts and liabilities of the provinces and undertook to pay, except in the case of Ontario and Quebec, interest at 5 p.c. on the amounts by which the actual per capita indebtedness of the provinces fell short of a basic debt allowance calculated at approximately \$25 per capita. On the subsequent entry of additional provinces into Confederation,

similar arrangements were effected regarding the assumption of their pre-Confederation indebtedness. From time to time, adjustments have been made in the basis of calculation of the debt allowances of the various provinces and the Dominion pays interest at 5 p.c. per annum on the amounts by which the actual debts of the provinces, on their entry into Confederation, fell short of the allowed debts as adjusted. The aggregate annual payment from the Dominion to the provinces in respect of interest on debt allowances is \$1,609,386.

Allowances for Government and Legislature.—Under the terms of the Union, annual grants of specific amounts were made to the various provinces for the support of their governments and legislatures. These fixed amounts vary with the population of the provinces according to the following scale, approved in 1907:—

Where population is—	\$
Under 150,000	100,000
150,000, but does not exceed 200,000	150,000
200,000, " " 400,000	180,000
400,000, " " 800,000	190,000
800,000, " " 1,500,000	220,000
Over 1,500,000	240,000

The aggregate annual allowances presently paid under this head amount to \$1,750,000.

Allowances per Head of Population.—Under the British North America Act of 1867, a grant of 80 cents per head of the population was allowed to each province. The British North America Act of 1907 provided that the grant would be paid to each province at the rate of 80 cents per head up to a population of 2,500,000, and at the rate of 60 cents per head for so much of the population as exceeds that number. The cost to the Dominion in 1937 of the annual allowances paid to the provinces per head of population was \$8,094,931.

Special Grants.—In the case of certain of the provinces, grants have been added to the original scale of subsidies in view of special circumstances obtaining, which, for the fiscal year 1937, amounted in aggregate to \$2,280,880 as set forth below:—

Prince Edward Island.—A special grant of \$195,000, less a deduction of \$39,120 (net grant of \$155,880).

New Brunswick.—An annual grant of \$150,000 since 1875 in consideration of the repeal of lumber duties reserved to the provinces by the B.N.A. Act of 1867.

Manitoba.—A special grant on the basis of population amounting at present to \$562,500 per annum.

Saskatchewan and Alberta.—Currently receiving an annual sum as compensation for loss of revenue derivable from their Public Lands, based on their respective populations which amounts, in the case of Saskatchewan, to \$750,000 per annum at present, and, in the case of Alberta, to \$562,500.

British Columbia.—A special grant amounting at present to \$100,000 per annum.

Other Special Grants.—In addition to the above, there are other special grants paid to the Maritime Provinces and British Columbia which are voted annually, aggregating, in the fiscal year 1937, \$3,225,000 as follows:—

	\$
Prince Edward Island	275,000
Nova Scotia	1,300,000
New Brunswick	900,000
British Columbia	750,000

14.—Subsidies of Dominion to Provincial Governments, fiscal years ended 1932-37.

Province.	1932.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	381,932 ¹	381,932 ¹	381,932 ¹	381,932 ¹	381,932 ¹	381,932 ¹
Nova Scotia.....	661,841 ¹	644,256 ¹	653,048 ¹	653,048 ¹	653,048 ¹	653,048 ¹
New Brunswick.....	693,040 ¹	693,040 ¹	693,040 ¹	693,040 ¹	693,040 ¹	693,040 ¹
Quebec.....	2,592,014	2,592,014	2,592,014	2,592,014	2,592,014	2,592,014
Ontario.....	2,941,425	2,941,424	2,941,424	2,941,424	2,941,424	2,941,424
Manitoba.....	1,694,195	1,694,195	1,705,340	1,716,484	1,716,484	1,703,022
Saskatchewan.....	2,112,803	2,112,803	2,128,889	2,144,975	2,144,975	2,120,084
Alberta.....	1,743,159	1,743,159	1,757,317	1,771,475	1,771,475	1,776,071
British Columbia.....	874,561	874,561	874,561	874,561 ¹	874,561 ¹	874,561 ¹
Totals.....	13,694,970	13,677,384	13,727,565	13,768,953	13,768,953	13,735,196

¹ Additional special grants, not included in above table, are paid to Prince Edward Island, Nova Scotia, New Brunswick, and British Columbia. The amounts of such special grants voted in 1937 are stated in the text immediately preceding this table.

15.—Total of Subsidy Allowances to Provincial Governments, from July 1, 1867, to Mar. 31, 1937.

Province.	Allowances for Government.	Allowances on Basis of Population.	Special Grants. ¹	Interest on Debt Allowances. ²	Total.
	\$	\$	\$	\$	\$
Prince Edward Island.....	4,020,000	5,487,229	5,131,944	2,680,424	17,319,597 ³
Nova Scotia.....	8,100,000	24,542,840	826,980	3,341,023	36,810,843 ³
New Brunswick.....	7,460,000	13,757,802	10,230,000	1,477,030	37,924,832 ³
Quebec.....	10,000,000	89,105,192	Nil	5,579,174	104,684,366
Ontario.....	10,400,000	109,756,017	Nil	5,313,348	125,469,365
Manitoba.....	7,305,000	18,482,324	21,581,733	14,495,372	61,864,429
Saskatchewan.....	6,156,667	17,587,522	19,281,250	12,972,000	55,997,439
Alberta.....	5,726,667	13,791,038	16,781,250	12,972,000	49,270,955
British Columbia.....	6,700,000	13,843,598	7,600,000	1,933,754	30,077,352 ³
Totals.....	65,868,334	311,353,562	81,433,157	60,764,125	519,419,178

¹ Compensation for lands and allowances for buildings. ² Allowances in lieu of debt. ³ Does not include special grants paid to Maritime Provinces and British Columbia.

Loans to Provinces.—All of the provincial loans recently advanced by the Dominion have been made to the western provinces under the authority of relief legislation beginning with the Unemployment and Farm Relief Act, 1931, and these have been secured by interest-bearing treasury bills of the respective provinces, the rate being 3 p.c. since July 1, 1936. The sum total of such loans outstanding as at Mar. 31, 1938, was \$148,288,254.

In addition to these, however, there were also outstanding at that date \$3,308,000 of housing loans, being the balance of loans made to the provinces in the years following the Great War, on the authority of Orders in Council passed in 1918 and 1919, and of the Appropriation Acts of 1920 and 1921. Upon these loans the province of Ontario repaid the whole of the advances in 1928, and the other provinces concerned have in most cases reduced their indebtedness from year to year.

Table 16 gives details of the loans made by the Dominion Government to the provinces concerned on account of relief expenditures, and Table 17 shows the amounts outstanding as at Mar. 31, of each of the years 1920-38, on account of loans made for housing.

16.—Loans to Provincial Governments Under the Relief Acts, by Provinces, fiscal years ended Mar. 31, 1934-38.

Province and Item.	1934.	1935.	1936.	1937.	1938.
	\$	\$	\$	\$	\$
Manitoba—					
Loans during year.....	2,384,000	4,127,000	4,720,655	4,627,000	2,982,000
Less cash repayments and credits of Dominion's share of expenditures.....	110,717	1,252,369	2,324,429	1,000	22,812
Net loans for year.....	2,273,283	2,874,631	2,396,226	4,626,000	2,959,188
Net loans outstanding at beginning of year..	7,960,716	10,233,999	13,108,630	15,504,856	20,130,856
Totals Outstanding Mar. 31.....	10,233,999	13,108,630	15,504,856	20,130,856	23,090,044
Saskatchewan—					
Loans during year.....	6,960,066	11,434,811	14,291,043	6,059,461	11,604,787
Less cash repayments and credits of Dominion's share of expenditures.....	1,490,826	1,293,797	45,565	582	—
Net loans for year.....	5,469,240	10,141,014	14,245,478	6,058,879	11,604,787
Net loans outstanding at beginning of year..	18,512,896	23,982,137	34,123,151	48,368,629	54,427,508
Totals Outstanding Mar. 31.....	23,982,136	34,123,151	48,368,629	54,427,508	66,032,295
Alberta—					
Loans during year.....	4,068,524	3,895,000	13,117,000	974,450	200,000
Less cash repayments and credits of Dominion's share of expenditures.....	17,781	1,968,524	13,000	169,252	7,000
Net loans for year.....	4,050,743	1,926,476	13,104,000	805,198	193,000
Net loans outstanding at beginning of year..	5,999,781	10,050,524	11,977,000	25,081,000	25,886,198
Totals Outstanding Mar. 31.....	10,050,524	11,977,000	25,081,000	25,886,198	26,079,198
British Columbia—					
Loans during year.....	3,535,000	8,225,000	12,566,000	4,044,000	2,000,000
Less cash repayments and credits of Dominion's share of expenditures.....	2,213,240	258,286	7,554	71,600	453,363
Net loans for year.....	1,321,760	7,966,714	12,558,446	3,972,400	1,541,637
Net loans outstanding at beginning of year..	5,725,760	7,047,520	15,014,234	27,572,680	31,545,080
Totals Outstanding Mar. 31.....	7,047,520	15,014,234	27,572,680	31,545,080	32,086,717
Grand Totals.....	51,314,179	74,223,015	116,527,165	131,989,642	148,288,254¹

¹ Less write-offs as follows: Manitoba, \$804,897; Saskatchewan, \$17,682,158; leaving net loans outstanding \$129,801,199.

17.—Loans to Provincial Governments Outstanding, on Account of Housing, by Provinces, as at Mar. 31, 1920-38.

Fiscal Year.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	British Columbia.	Total.
	\$	\$	\$	\$	\$	\$	\$	\$
1920.....	Nil	Nil	600,000	60,000	8,750,000	1,580,000	750,000	11,740,000
1921.....	Nil	600,000	1,220,000	1,146,700	8,750,000	1,580,000	1,361,500	14,658,200
1922.....	Nil	1,100,000	1,525,000	2,312,885	8,750,000	1,975,000	1,701,500	17,364,385
1923.....	50,000	1,537,000	1,525,000	4,391,617	9,350,000	1,975,000	1,701,500	20,530,117
1924.....	50,000	1,537,000	1,525,000	7,359,590	9,350,000	1,975,000	1,701,500	23,498,090
1925.....	50,000	1,537,000	1,525,000	7,355,305	9,350,000	1,975,000	1,701,500	23,493,805
1926.....	50,000	1,537,000	1,462,000	7,352,018	9,350,000	1,975,000	1,701,500	23,427,518
1927.....	50,000	1,537,000	1,308,000	7,337,843	9,350,000	1,825,000	1,701,500	23,109,343
1928.....	50,000	1,362,000	1,250,000	7,317,403	Nil	1,660,000	1,701,500	13,340,903
1929.....	50,000	1,212,000	1,198,000	7,304,203	Nil	1,600,000	1,701,500	13,065,703
1930.....	50,000	1,077,000	1,136,000	5,796,703	Nil	1,550,000	1,701,500	11,311,203
1931.....	36,500	1,017,000	1,057,000	5,384,688	Nil	1,475,000	1,701,500	10,671,688
1932.....	35,000	937,000	988,000	5,384,688	Nil	1,475,000	1,701,500	10,521,188
1933.....	34,000	877,000	910,000	5,384,688	Nil	1,475,000	1,701,500	10,382,188
1934.....	33,000	822,000	860,500	5,384,688	Nil	1,367,000	1,701,500	10,168,688
1935.....	33,000	757,000	800,000	5,384,688	Nil	1,095,000	1,701,500	9,771,188
1936.....	31,500	682,000	648,700	2,609,688	Nil	1,095,000	1,701,500	6,768,388
1937.....	30,500	607,000	588,700	730,688	Nil	1,072,000	1,701,500	4,730,388
1938.....	29,500	537,000	Nil	Nil	Nil	1,040,000	1,701,500	3,308,000

Subsection 6.—The National Debt.

The gross national debt of Canada on Mar. 31, 1914, was \$544,391,369, as against assets of \$208,394,519, leaving a net debt of \$335,996,850. Comparatively small as was this debt, it was a debt incurred almost altogether either for public works of general utility which, like the Intercolonial and transcontinental railways and the canal system, remained assets, though perhaps not realizable assets of the nation, or was expended as subsidies to enterprises, which, like the Canadian Pacific Railway, though not government-owned, assisted greatly in extending the area of settlement as well as the productive and, therefore, the taxable capacity of the country. Broadly speaking, it was a debt incurred for productive purposes. Also, it was mainly held outside the country, the principal of the Dominion funded debt payable in London being \$302,842,485 on Mar. 31, 1914, as against only \$717,453 payable in Canada.

The great changes brought about in our national debt during the 22 years from 1914 to 1937 have been: (1) the enormous increase in net debt from \$335,996,850 to \$3,083,952,202; (2) the gross debt, having been largely incurred for war purposes is not represented by corresponding assets; (3) the debt is now mainly held in Canada, \$2,478,491,235 being payable in Canada at Mar. 31, 1937.

Recent Funded Debt Operations.—Conversions and other national debt operations carried out between 1931 and 1934 are dealt with at pp. 905-907 of the 1934-35 Year Book, those of the fiscal year 1935 on pp. 845-846 of the 1936 Year Book, those of the fiscal year 1937 on p. 837 of the 1937 Year Book and those between 1914 and 1930 at pp. 842-843 of the 1933 Year Book. The following review carries the summary down to Mar. 31, 1938.

On May 5, 1937, an issue of \$113,500,000 was made in Canada for the purpose of converting a part of the \$236,299,800 5½ p.c. Victory Loan due Dec. 1, 1937. This issue was a conversion operation only, no cash applications being accepted. The new issue was comprised of three maturities, 1 p.c. two-year bonds due June 1, 1939, 2 p.c. five-year bonds due June 1, 1942, and 3½ p.c. twelve-year bonds due June 1, 1949, yielding 1.38 p.c., 2.375 p.c., and 3.35 p.c., respectively, to the purchaser.

To provide a part of the funds to pay off the unconverted portion of the 5½ p.c. Victory Loan Bonds, an issue of \$100,000,000 was made in Canada on Nov. 3, 1937. This issue was also in three maturities, 1 p.c. one and one-half-year bonds due June 1, 1939, 2½ p.c. seven-year bonds due Nov. 15, 1944, and 3½ p.c. fourteen-year bonds due Nov. 15, 1951, yielding 1.59 p.c., 2.74 p.c., and 3.34 p.c., respectively. The \$33,293,000 4 p.c. school land debentures due July 1, 1937, and held by the provinces of Manitoba, Saskatchewan, and Alberta, were renewed for a further period of one year at an interest rate of 4 p.c.

In the past four years a market for short-term treasury bills has been built up in Canada which has proven highly satisfactory. Each issue has, with two exceptions (where the bills were sold direct to the Bank of Canada), been offered for public tender. A complete list of treasury bills sold by public tender for the period

Mar. 1, 1934, to Feb. 15, 1937, appeared on p. 838 of the 1937 Year Book. The sales since that date are as follows:—

TREASURY BILLS SOLD IN CANADA, MAR. 1, 1937, TO APR. 1, 1938.

Date of Issue.	Date of Maturity.	Amount.	Average Cost.	Date of Issue.	Date of Maturity.	Amount.	Average Cost.
		\$	p.c.			\$	p.c.
Mar. 1, 1937	June 1, 1937	20,000,000	0-795	Oct. 1, 1937	Dec. 31, 1937	25,000,000	0-660
Mar. 15, 1937	June 15, 1937	25,000,000	0-805	Oct. 15, 1937	Jan. 14, 1938	25,000,000	0-696
Apr. 1, 1937	July 2, 1937	25,000,000	0-786	Nov. 1, 1937	Feb. 1, 1938	25,000,000	0-781
Apr. 15, 1937	July 15, 1937	25,000,000	0-771	Nov. 15, 1937	Feb. 15, 1938	25,000,000	0-816
May 1, 1937	July 31, 1937	20,000,000	0-749	Dec. 1, 1937	Mar. 1, 1938	25,000,000	0-785
May 15, 1937	Aug. 16, 1937	20,000,000	0-715	Dec. 15, 1937	Mar. 15, 1938	25,000,000	0-761
June 1, 1937	Sept. 1, 1937	20,000,000	0-678	Dec. 31, 1937	Apr. 1, 1938	25,000,000	0-744
June 15, 1937	Sept. 15, 1937	25,000,000	0-643	Jan. 14, 1938	Apr. 14, 1938	25,000,000	0-726
July 2, 1937	Oct. 1, 1937	25,000,000	0-634	Feb. 1, 1938	Apr. 30, 1938	25,000,000	0-700
July 15, 1937	Oct. 15, 1937	25,000,000	0-632	Feb. 15, 1938	May 16, 1938	25,000,000	0-648
July 31, 1937	Nov. 1, 1937	25,000,000	0-633	Mar. 1, 1938	June 1, 1938	25,000,000	0-584
Aug. 16, 1937	Nov. 15, 1937	25,000,000	0-636	Mar. 15, 1938	June 15, 1938	25,000,000	0-524
Sept. 1, 1937	Dec. 1, 1937	25,000,000	0-628	Apr. 1, 1938	June 30, 1938	25,000,000	0-510
Sept. 15, 1937	Dec. 15, 1937	25,000,000	0-632				

Statistics of National Debt.—Summary statistics of the national debt of Canada as at Confederation, and at the end of each fiscal year thereafter down to 1937, are given in Table 18, while details of the active assets and of the gross liabilities, which formerly followed here as Tables 19 and 20, are now given as at the end of each of the past five fiscal years in Table 1, pp. 839-840. Further details of the funded debt, showing the various issues of bonds, the annual interest charges and the place at which principal and interest are payable, are given as at Mar. 31, 1937, in Table 19. From this it appears that the total payable in London at that date was \$409,867,597, in New York \$449,000,000, and in Canada \$2,478,491,235. Thus three-quarters of the funded debt of the Dominion was payable within the Dominion itself, and the interest payable outside of Canada was a comparatively small item.

18.—Summary of the Public Debt of Canada and Interest Payments Thereon, July 1, 1867, to Mar. 31, 1937.

Fiscal Yr.	Gross Debt.	Total Assets.	Net Debt.	Net Debt Per Capita. ¹	Increase or Decrease of Debt during the Year. ²	Interest Paid on Debt.	Interest Received from Active Assets.	Interest Paid Per Capita. ¹
	\$	\$	\$	\$	\$	\$	\$	\$
1867.	93,046,052	17,317,410	75,728,642	21-87	—	—	—	—
1868.	96,896,666	21,139,531	75,757,135	21-58	28,493	4,501,568	126,420	1-28
1869.	112,361,998	36,502,679	75,859,319	21-28	102,184	4,907,014	313,021	1-38
1870.	115,993,706	37,783,964	78,209,742	21-58	2,350,423	5,047,054	383,956	1-39
1871.	115,492,683	37,786,165	77,706,518	21-06	-503,225	5,165,304	554,384	1-40
1872.	122,400,179	40,213,107	82,187,072	21-89	4,480,554	5,257,231	488,042	1-40
1873.	129,743,432	29,894,970	99,848,462	26-10	17,661,390	5,209,206	396,404	1-36
1874.	141,163,551	32,838,587	108,324,964	27-81	8,476,502	5,724,436	610,863	1-47
1875.	151,663,402	35,655,024	116,008,378	29-34	7,683,414	6,590,790	840,887	1-67
1876.	161,204,638	36,653,174	124,551,514	31-07	8,543,136	6,400,902	798,906	1-60
1877.	174,675,835	41,440,526	133,235,309	32-78	8,683,795	6,797,227	717,684	1-67
1878.	174,957,269	34,595,199	140,362,070	34-07	7,126,761	7,048,884	605,774	1-71
1879.	179,483,871	36,493,684	142,990,187	34-17	2,628,117	7,194,734	592,500	1-72
1880.	194,634,441	42,182,852	152,451,589	35-83	9,461,402	7,773,869	834,793	1-83
1881.	199,861,537	44,465,757	155,395,780	35-93	2,944,191	7,594,145	751,513	1-76
1882.	205,365,252	51,703,601	153,661,651	35-12	-1,734,129	7,740,804	914,009	1-77
1883.	202,159,104	43,692,390	158,466,714	35-77	4,805,063	7,668,552	1,001,193	1-73
1884.	242,482,416	60,320,566	182,161,850	40-60	23,695,136	7,700,181	986,698	1-72
1885.	264,703,607	68,295,915	196,407,692	43-29	14,245,842	9,419,482	1,997,936	2-08
1886.	273,164,341	50,005,234	223,159,107	48-72	26,751,415 ³	10,137,009	2,299,079	2-21
1887.	273,187,626	45,872,851	227,314,775	49-14	4,155,668	9,682,929	990,887	2-09
1888.	284,513,842	49,982,484	234,531,358	50-13	7,216,583	9,823,313	932,025	2-10
1889.	287,722,063	50,192,021	237,530,042	50-23	2,998,684	10,148,932	1,305,392	2-15
1890.	286,112,295	48,579,083	237,533,212	49-70	3,170	9,656,841	1,082,271	2-02
1891.	289,899,230	52,090,199	237,809,031	49-21	275,819	9,584,137	1,077,228	1-98
1892.	295,333,274	54,201,840	241,131,434	49-38	3,322,403	9,763,978	1,086,420	2-00
1893.	300,054,525	58,373,485	241,681,040	49-01	549,606	9,806,888	1,150,167	1-99
1894.	308,348,023	62,164,994	246,183,029	49-44	4,501,989	10,212,596	1,217,809	2-05

For footnotes, see end of table, p. 861.

18.—Summary of the Public Debt of Canada and Interest Payments Thereon, July 1, 1867, to Mar. 31, 1937—concluded.

Fiscal Yr.	Gross Debt.	Total Assets.	Net Debt.	Net Debt Per Capita. ¹	Increase or Decrease of Debt during the Year. ²	Interest Paid on Debt.	Interest Received from Active Assets.	Interest Paid per Capita. ¹
	\$	\$	\$	\$	\$	\$	\$	\$
1895.	318,048,755	64,973,828	253,074,927	50.35	6,891,898	10,466,294	1,336,047	2.08
1896.	325,717,537	67,220,104	258,497,433	50.95	5,422,506	10,520,430	1,370,001	2.07
1897.	332,530,131	70,991,535	261,538,596	51.06	3,041,163	10,645,663	1,443,004	2.08
1898.	338,375,984	74,419,585	263,956,399	51.01	2,417,803	10,516,758	1,513,455	2.03
1899.	345,160,903	78,887,456	266,273,447	50.86	2,317,048	10,855,112	1,590,448	2.07
1900.	346,206,980	80,713,173	265,493,807	50.08	-779,640	10,699,645	1,683,051	2.02
1901.	354,732,433	86,252,429	268,480,004	49.99	2,986,197	10,807,955	1,784,834	2.01
1902.	366,358,477	94,529,387	271,829,090	49.48	3,349,086	10,975,935	1,892,224	2.00
1903.	361,344,098	99,737,109	261,606,989	46.29	-10,222,101 ⁴	11,068,139	2,020,953	1.96
1904.	364,962,512	104,094,793	260,867,719	44.77	-739,270 ⁵	11,128,637	2,236,256	1.91
1905.	377,678,580	111,454,413	266,224,167	44.36	5,356,448	10,630,115	2,105,031	1.77
1906.	392,269,680	125,226,703	267,042,977	43.09	818,810	10,814,697	2,140,312	1.75
1907 ⁶ .	379,966,826	116,294,966	263,671,860	41.13	-3,371,117	10,717,571	1,235,746	1.05
1908.	408,207,158	130,246,198	277,960,860	41.96	14,289,000	6,973,797	1,925,569	1.66
1909.	478,535,427	154,605,148	323,930,279	47.64	45,969,419	11,604,584	2,256,643	1.71
1910.	470,663,046	134,394,500	336,268,546	48.12	12,338,267	13,098,161	2,807,465	1.87
1911.	474,941,487	134,899,435	340,042,052	47.18	3,773,506	12,535,851	1,668,773	1.74
1912.	508,338,592	168,419,131	339,919,461	46.00	-122,591	12,259,397	1,281,317	1.66
1913.	483,232,555	168,930,930	314,301,625	41.18	-25,617,836	12,605,882	1,430,511	1.65
1914.	544,391,369	208,394,519	335,996,850	42.64	21,695,225	12,893,505	1,964,541	1.64
1915.	700,473,814	251,097,731	449,376,083	56.31	113,379,233	15,736,743	2,980,247	1.97
1916.	936,987,802	321,831,631	615,156,171	76.88	165,780,088	21,421,585	3,358,210	2.68
1917.	1,382,003,268	502,816,970	879,186,298	109.08	264,030,127	35,802,567	3,094,012	4.44
1918.	1,863,335,899	671,451,836	1,191,884,063	146.28	312,697,765	47,845,588	4,466,724	5.87
1919.	2,676,635,725	1,102,104,692	1,574,531,033	189.45	382,646,970	77,431,432	7,421,002	9.32
1920.	3,041,529,587	792,660,963 ⁷	2,248,868,624	262.84	674,337,591	107,527,089	17,086,981	12.57
1921.	2,902,482,117	561,603,133 ⁷	2,340,878,984	266.37	92,010,360	139,551,520	24,815,246	15.88
1922.	2,902,347,137	480,211,335 ⁷	2,422,135,802	271.57	81,256,817	135,247,849	21,961,513	15.16
1923.	2,888,827,237	435,050,368 ⁷	2,453,776,869	272.34	31,641,067	137,892,735	16,465,303	15.30
1924.	2,819,610,470	401,827,195 ⁷	2,417,783,275	264.44	-35,993,594	136,237,872	11,916,479	14.90
1925.	2,818,066,523	400,628,837 ⁷	2,417,437,686	260.11	-345,589	134,789,604	11,332,328	14.50
1926.	2,768,779,184	379,048,085 ⁷	2,389,731,099	252.85	-27,706,587	130,691,493	8,535,086	13.83
1927.	2,726,298,717	378,464,347 ⁷	2,347,834,370	243.65	-41,896,729	129,675,367	8,559,401	13.46
1928.	2,677,137,243	380,287,010 ⁷	2,296,850,233	233.54	-50,984,137	128,902,945	10,937,822	13.11
1929.	2,647,033,973	421,529,268 ⁷	2,225,504,705	221.91	-71,345,528	124,989,950	12,227,562	12.46
1930.	2,544,586,411	366,822,452 ⁷	2,177,763,959	213.34	-47,740,746	121,566,213	13,518,205	11.91
1931.	2,610,265,698	348,653,762 ⁷	2,261,611,937	217.94	83,847,978	121,289,844	10,421,224	11.69
1932.	2,831,743,563	455,897,390 ⁷	2,375,846,172	226.14	114,234,236	121,551,106	9,330,125	11.53
1933.	2,996,366,665	399,885,839 ⁷	2,596,480,826	243.09	220,634,654	134,999,069	11,220,989	12.64
1934.	3,141,042,097	411,063,957 ⁷	2,729,978,141	251.96	133,497,314	139,725,417	11,148,231	12.91
1935.	3,205,956,669	359,845,411 ⁷	2,846,110,958	259.94	116,132,817	138,533,202	10,963,478	12.67
1936.	3,341,944,027	425,843,509 ⁷	3,006,100,517	271.68	159,989,559	134,549,169	10,614,125	12.20
1937.	3,542,521,139	458,568,937 ⁷	3,083,952,202	277.33	77,851,685	137,410,345	11,231,035	12.36

¹ The per capita figures are based on the official estimates of population given at p. 155.

The minus sign (—) denotes a decrease.

from the Canadian Pacific Rly. Co.

of accounts with Ontario and Quebec.

tario and Quebec under 47 Vict., c. 6.

² The

³ This amount includes \$10,199,520, for which land was taken

⁴ This amount includes \$3,305,450, caused by the settlement

⁵ This amount takes into account \$5,397,503, allowed to Ontario

⁶ Nine months.

⁷ Active assets only.

19.—Funded Debt and Treasury Bills of the Dominion, Interest Payable Thereon, Date of Maturity, Rates of Interest, and Centres at which Loans are Payable, as at Mar. 31, 1937.

Date of Maturity.	Name of Loan.	Rate.	Where Payable.	Amount of Loan Outstanding.	Annual Interest Charges.
		p.c.		\$ cts.	\$ cts.
1937—July 1	Debentures—School Lands.....	4	Canada.....	33,293,470 85	1,331,738 83
Dec. 1	Victory Loan, 1917.....	5½	Canada.....	236,299,800 00	12,996,489 00
1938—July 1	Loan of 1888—				
	£1,658,471—18—11.....	3	Dan.....	8,071,230 16	242,136 90
July 1	Loan of 1892—£3,750,000—0—0....	3	London.....	18,250,000 00	547,500 00
July 1	Loan of 1894—£2,250,000—0—0....	3	London.....	10,950,000 00	328,500 00
July 1	C.P.R. Land Grant Loan—				
	£3,093,700—0—0.....	3½	London.....	15,056,006 66	526,960 23
Oct. 15	Loan of 1935.....	2	Canada.....	90,000,000 00	1,800,000 00
1939—Jan. 1	Three Year Notes.....	2	New York.....	40,000,000 00	800,000 00
Oct. 15	Refunding Loan, 1933.....	4	Canada.....	47,269,500 00	1,890,780 00
Oct. 15	Refunding Loan, 1934.....	2½	Canada.....	7,933,000 00	198,325 00
Nov. 15	Loan of 1935.....	2	Canada.....	20,000,000 00	400,000 00

19.—Funded Debt and Treasury Bills of the Dominion, Interest Payable Thereon, Date of Maturity, Rates of Interest, and Centres at Which Loans are Payable, as at Mar. 31, 1937—concluded.

Date of Maturity.	Name of Loan.	Rate.	Where Payable.	Amount of Loan Outstanding.	Annual Interest Charges.
		p.c.		\$ cts.	\$ cts.
1940—Mar. 1	Loan of 1935.....	3	Canada.....	115,013,636 82	3,450,409 10
June 1	Loan of 1936.....	1½	Canada.....	80,000,000 00	1,200,000 00
Sept. 1	Refunding Loan, 1925.....	4½	Canada.....	75,000,000 00	3,375,000 00
1941—Mar. 15	Four and One-half Year Notes.....	1	Canada.....	45,000,000 00	450,000 00
Nov. 15	National Service Loan, 1931.....	5	Canada.....	141,663,000 00	7,083,150 00
1942—Oct. 15	Refunding Loan, 1934.....	3	Canada.....	40,409,000 00	1,212,270 00
1943—June 1	Loan of 1935.....	2½	Canada.....	20,000,000 00	500,000 00
Oct. 15	Refunding Loan, 1923.....	5	Canada.....	147,000,100 00	7,350,005 00
1944—Jan. 15 ¹	Loan of 1937.....	2½	New York.....	30,000,000 00	675,000 00
Oct. 15	Refunding Loan, 1924.....	4½	Canada.....	50,000,000 00	2,250,000 00
1945—Aug. 15 ²	Loan of 1935.....	2½	New York.....	76,000,000 00	1,900,000 00
Oct. 15 ³	Refunding Loan, 1933.....	4	Canada.....	88,337,500 00	3,533,500 00
1946—Feb. 1	Refunding Loan, 1926.....	4½	Canada.....	45,000,000 00	2,025,000 00
1947—Oct. 1	Loan of 1897—£1,004,421-14-2.....	2½	London.....	4,888,185 64	122,204 64
1949—Oct. 15 ⁴	Refunding Loan, 1934.....	3½	Canada.....	138,322,000 00	4,841,270 00
1950—July 1 ⁵	Loan of 1930-50—£28,162,775-11-0.....	3½	London.....	137,058,841 00	4,797,059 43
1952—May 1 ⁶	Loan of 1922.....	5	New York.....	100,000,000 00	5,000,000 00
Oct. 15 ⁷	Loan of 1932.....	4	Canada.....	56,191,000 00	2,247,640 00
1955—May 1 ⁸	Loan of 1934—£10,000,000-0-0.....	3½	London.....	48,666,666 67	1,581,666 67
June 1 ⁹	Loan of 1935 dated June 1.....	3	Canada.....	40,000,000 00	1,200,000 00
June 1 ⁹	Loan of 1935 dated Nov. 15.....	3	Canada.....	55,000,000 00	1,650,000 00
1956—Nov. 1 ¹⁰	Conversion Loan, 1931.....	4½	Canada.....	43,125,700 00	1,940,556 50
1957—Nov. 1 ¹¹	Conversion Loan, 1931.....	4½	Canada.....	37,523,200 00	1,688,544 00
1958—Sept. 1 ¹²	Loan of 1933—£15,000,000-0-0.....	4	London.....	73,000,000 00	2,920,000 00
Nov. 1 ¹³	Conversion Loan, 1931.....	4½	Canada.....	276,687,600 00	12,450,942 00
1959—Nov. 1 ¹⁴	Conversion Loan, 1931.....	4½	Canada.....	289,693,300 00	13,036,198 50
1960—Oct. 1 ¹⁵	Loan of 1940-60—£19,300,000-0-0.....	4	London.....	93,926,666 66	3,757,066 67
Oct. 1 ¹⁶	Loan of 1930.....	4	New York.....	100,000,000 00	4,000,000 00
1961—Jan. 15 ¹⁷	Loan of 1936.....	3½	New York.....	48,000,000 00	1,560,000 00
1966—June 1 ¹⁸	Loan of 1936.....	3½	Canada.....	54,703,000 00	1,777,847 50
Sept. 15 ¹⁹	Perpetual Loan of 1936.....	3	Canada.....	55,000,000 00	1,650,000 00
1967—Jan. 15 ²⁰	Loan of 1937.....	3	New York.....	55,000,000 00	1,650,000 00
1937—Apr. 1	Treasury Bills.....	·745	Canada.....	25,000,000 00	186,250 00
Apr. 15	Treasury Bills.....	·747	Canada.....	25,000,000 00	186,750 00
May 1	Treasury Bills.....	·758	Canada.....	30,000,000 00	227,400 00
May 15	Treasury Bills.....	·776	Canada.....	25,000,000 00	194,000 00
June 1	Treasury Bills.....	·794	Canada.....	20,000,000 00	158,800 00
June 15	Treasury Bills.....	·804	Canada.....	25,000,000 00	201,000 00
Demand	Dominion Stock, Issue A.....	6	Canada.....	4,000 00	240 00
	Dominion Stock, Issue B.....	3½	Canada.....	10,600 00	371 00
	Compensation to Seigneurs.....	6	Canada.....	11,827 40	709 64
				3,337,358,831 86	125,093,380 61
	Recapitulation—				
	Payable in Canada.....			2,478,491,235 07	94,685,286 07
	Payable in New York.....			449,000,000 00	15,585,000 00
	Payable in London.....			409,867,596 79	14,823,094 54
				3,337,358,831 86	125,093,380 61
	Less bonds and stocks of the above loans held as sinking funds.....			61,815,007 93	
	Net Funded Debt and Treasury Bills.....			3,275,543,823 93	

¹ Subject to redemption as a whole on or after Jan. 15, 1943, on 30 days' notice.

² Subject to redemption in whole or in part on Aug. 15, 1943, or on any subsequent interest date on 30 days' notice.

³ Subject to redemption as a whole on Oct. 15, 1943, or on any subsequent interest date on 60 days' notice.

⁴ Subject to redemption as a whole on Oct. 15, 1944, or on any subsequent interest date on 60 days' notice.

⁵ Subject to redemption on or after July 1, 1930, on 6 months' notice.

⁶ Subject to redemption as a whole on or after May 1, 1942, on 60 days' notice.

⁷ Subject to redemption as a whole on Oct. 15, 1947, or on any subsequent interest date on 60 days' notice.

⁸ Subject to redemption in whole or in part on or after May 1, 1950, on 3 months' notice.

⁹ Subject to redemption as a whole on June 1, 1950, or on any subsequent interest date on 60 days' notice.

¹⁰ Subject to redemption as a whole on Nov. 1, 1946, or on any subsequent interest date on 60 days' notice.

¹¹ Subject to redemption as a whole on Nov. 1, 1947, or on any subsequent interest date on 60 days' notice.

¹² Subject to redemption in whole or in part on or after Sept. 1, 1953, on 3 months' notice.

¹³ Subject to redemption as a whole on Nov. 1, 1948, or on any subsequent interest date on 60 days' notice.

¹⁴ Subject to redemption as a whole on Nov. 1, 1949, or on any subsequent interest date on 60 days' notice.

¹⁵ Subject to redemption in whole or in part on or after Oct. 1, 1940, on 3 months' notice.

¹⁶ Subject to redemption as a whole on Oct. 1, 1950, or on any subsequent interest date on 60 days' notice.

¹⁷ Subject to redemption in whole or in part on Jan. 15, 1956, or on any subsequent interest date on 30 days' notice.

¹⁸ Subject to redemption as a whole on June 1, 1956, or on any subsequent interest date on 60 days' notice.

¹⁹ Subject to redemption in whole or in part on or after Sept. 15, 1966, on 60 days' notice.

²⁰ Subject to redemption in whole or in part on any interest date on 60 days' notice as follows: to and including Jan. 15, 1942, at 105 p.c.; thereafter to and including Jan. 15, 1947, at 104 p.c.; thereafter to and including Jan. 15, 1952, at 103 p.c.; thereafter to and including Jan. 15, 1957, at 102 p.c.; thereafter to and including Jan. 15, 1962, at 101 p.c.; thereafter at 100 p.c.

The Interest-Bearing Debt of Canada.—Something of the extent of the burden of national debt being carried by the Canadian people may be realized from the fact that, for the fiscal year ended Mar. 31, 1937, the interest charges on the total interest-bearing debt amounted to about 35 p.c. of the total receipts from taxation and nearly 30 p.c. of the receipts from all sources.

Before the Great War, interest rates were comparatively moderate, but the unprecedented expenditure of the world's capital in that gigantic struggle led, in all the participating countries, to the raising of enormous loans at comparatively high rates of interest, which in many cases still have to be paid until refunding becomes possible under the terms of the contracts made between the nations and their creditors. Thus, in Canada, the average rate of interest paid upon the direct interest-bearing obligations of the nation, which was only 3.368 p.c. at Mar. 31, 1913, rose to 5.164 p.c. at Mar. 31, 1922, and fell gradually to 3.759 p.c. at Mar. 31, 1937. Details of the interest-bearing debt of Canada, and the interest charges thereon, as at Mar. 31 of the years from 1913 to 1937 are given in Table 20.

20.—The Interest-Bearing Debt, the Annual Interest Charge Thereon and the Average Rate of Interest, as at Mar. 31, 1913-37.

Fiscal Year.	Bonds, Debentures and Treasury Bills.	Annual Interest Charges on Bonds, Debentures and Treasury Bills.	Average Interest Rate on Bonds, Debentures and Treasury Bills.	Savings Bank Deposits, Trust and Other Funds.	Annual Interest on Savings Bank Deposits and Other Funds.	Total Interest-Bearing Debt. ¹	Annual Interest Charge.	Average Rate of Interest.
	\$	\$	p.c.	\$	\$	\$	\$	p.c.
1913...	260,869,037	8,973,746	3.439	91,735,123	2,904,287	352,604,160	11,878,033	3.368
1914...	311,833,272	11,162,047	3.579	93,031,928	2,957,544	404,865,200	14,119,591	3.487
1915...	358,659,932	13,075,447	3.645	91,910,510	2,935,881	450,570,442	16,011,328	3.554
1916...	508,000,366	20,499,696	4.035	92,240,955	2,960,002	600,241,321	23,459,698	3.908
1917...	893,208,877	39,098,579	4.376	96,885,192	3,114,315	990,094,069	42,212,894	4.263
1918...	1,472,098,608	71,121,368	4.831	95,796,899	3,096,532	1,567,895,507	74,217,900	4.733
1919...	2,035,218,097	102,218,489	5.022	100,636,102	3,441,803	2,135,854,199	105,660,292	4.947
1920...	2,596,816,821	134,559,302	5.181	107,038,317	4,275,480	2,703,855,138	138,834,782	5.134
1921...	2,520,997,021	130,416,007	5.173	107,345,848	4,429,302	2,628,342,369	134,845,309	5.130
1922...	2,564,587,671	133,482,113	5.204	105,379,439	4,399,661	2,669,967,110	137,881,774	5.164
1923...	2,547,105,821	131,476,511	5.161	106,763,391	4,531,156	2,653,869,212	136,007,667	5.125
1924...	2,504,033,820	128,571,337	5.134	110,113,766	4,626,715	2,614,147,586	133,198,052	5.092
1925...	2,503,763,169	125,928,071	5.029	113,943,282	4,758,780	2,617,706,451	130,686,851	4.992
1926...	2,484,410,336	125,108,738	5.035	119,205,393	4,977,889	2,603,615,729	130,086,627	4.996
1927...	2,439,340,736	123,399,911	5.058	126,310,527	5,274,429	2,565,651,263	128,674,340	5.015
1928...	2,377,581,086	119,479,400	5.025	136,485,482	5,721,330	2,514,066,568	125,200,730	4.980
1929...	2,325,413,986	116,843,934	5.024	145,780,369	6,156,036	2,471,194,355	122,999,970	4.977
1930...	2,250,837,286	112,942,215	5.017	154,997,435	6,572,018	2,405,834,721	119,514,233	4.967
1931...	2,320,832,286	115,491,955	4.976	163,994,443	6,969,151	2,484,826,729	122,461,106	4.928
1932...	2,579,238,724	128,188,969	4.970	136,356,977	5,522,579	2,715,595,701	133,711,548	4.923
1933...	2,715,977,874	132,866,543	4.892	144,176,675	5,858,850	2,860,154,549	138,725,393	4.850
1934...	2,858,624,524	132,054,806	4.630	154,137,868	6,093,937	3,012,762,392	138,448,743	4.595
1935...	3,061,955,821	127,074,870	4.150	171,554,957	6,683,560	3,233,510,778	133,758,430	4.136
1936...	3,265,314,332	128,598,908	3.938	196,197,897 ²	7,679,285	3,461,512,729	136,278,193	3.937
1937...	3,337,358,832	125,093,381	3.748	224,157,683	8,798,557	3,561,516,514	133,891,938	3.759

¹ The total of interest-bearing debt, as here given, includes bonds purchased and held by the Treasury for sinking funds.

² In 1936 an amount of \$11,827, being compensation to seigneurs, previously included under Savings Bank Deposits, Trust and Other Funds, was transferred to Bonds, Debentures and Treasury Bills.

Guaranteed Debt of the Dominion.—Besides the direct debt of the Dominion, already dealt with, there are also large indirect obligations, arising mainly out of the guarantee of securities, by the Dominion, of the railway lines which now form the Canadian National Railways, and the subsequent extensions thereof. Together with these are other smaller indirect obligations, originating in the Government's guarantees of the bonds of the Canadian National Steamship services and of the bonds of its Harbour Commissions, issued in the main for harbour improvements. Since 1932 guarantees of certain bank loans have been made under the various Relief Acts. With the commencement of business of the Bank of Canada on Mar. 11, 1935, the guarantee, authorized by Sec. 27 (6) of the Bank of Canada Act, of the deposit required to be maintained by every chartered bank in the Bank of Canada, came into force. This guarantee will require to be implemented "in the event of the property and assets of the Bank being insufficient to pay its liabilities, and if the Bank suspends payment of any of its liabilities". Under the terms of the Home Improvement Loans Guarantee Act, 1937, the Government guarantees chartered banks and other approved lending institutions against losses up to 15 p.c. of the aggregate value of loans made by each such institution for the financing of repairs, alterations, and improvements to rural and urban dwellings. The Act provides that the aggregate amount of loans to be guaranteed shall not exceed \$50,000,000 and therefore the limit of the Government's guarantee is \$7,500,000. Statistics showing the growth of these indirect obligations since 1914 are given in Table 21, while Table 22 shows the obligations as they existed on Mar. 31, 1937.

21.—Securities Guaranteed by the Dominion Government (Amounts Held by the Public), as at Mar. 31, 1914-37.

NOTE.—Dashes in this table indicate that there were no guarantees of the type shown, for the corresponding years.

Fiscal Year.	Railways, Guaranteed as to Principal and Interest.	Railways, Guaranteed as to Interest only.	Canadian National Steam- ships.	Harbour Commis- sions.	Other Guarantees.	Bank of Canada.	Total.
	\$	\$	\$	\$	\$	\$	\$
1914.....	94,738,584	-	-	-	-	-	94,738,584
1915.....	114,644,310	-	-	-	-	-	114,644,310
1916.....	135,546,098	-	-	-	-	-	135,546,098
1917.....	135,546,098	-	-	-	-	-	135,546,098
1918.....	135,546,098	-	-	-	-	-	135,546,098
1919.....	130,436,098	-	-	-	-	-	130,436,098
1920.....	130,436,098	-	-	-	-	-	130,436,098
1921.....	197,545,125	-	-	-	-	-	197,545,125
1922.....	248,987,789	-	-	-	-	-	248,987,789
1923.....	237,878,762	216,207,142	-	-	-	-	454,085,904
1924.....	309,628,762	216,207,142	-	-	-	-	525,835,904
1925.....	365,915,762	216,207,142	-	-	-	-	582,122,904
1926.....	364,415,762	216,207,142	-	-	-	-	580,622,904
1927.....	397,795,002	216,207,142	-	4,000,000	-	-	618,002,144
1928.....	440,224,186	216,207,142	828,789	9,467,165	-	-	666,727,282
1929.....	472,709,509	216,207,142	7,936,486	17,355,118	-	-	714,208,255
1930.....	590,091,292	216,207,142	9,400,000	21,335,118	-	-	837,033,552
1931.....	707,474,852	216,207,142	9,400,000	21,835,118	-	-	954,917,112
1932.....	753,080,146	216,207,142	9,400,000	21,835,118	-	-	1,000,522,406 ¹
1933.....	748,874,239	216,207,142	9,400,000	21,670,472	28,272,301 ¹	-	1,024,424,154 ¹
1934.....	746,035,434	216,207,142	9,400,000	21,634,472	93,296,073 ¹	-	1,086,573,121 ¹
1935.....	740,117,976	216,207,142	9,400,000	21,601,481	104,525,860	149,028,902	1,240,881,361
1936.....	747,366,632	216,207,142	9,400,000	21,576,481	96,044,370	188,202,917	1,278,797,542
1937.....	756,163,072	216,207,142	9,400,000	21,565,595	14,836,167	194,275,314	1,212,447,290

¹ Unstated advances re wheat marketing are not included.

22.—Securities Guaranteed by the Dominion Government, as at Mar. 31, 1937.

Security.	Amount of Guarantee Authorized.	Amount Outstanding and Held by the Public as at Mar. 31, 1937.	Where Payable.
	\$	\$	
Railway Securities Guaranteed as to Principal and Interest—			
1. Canadian Northern Rly. Co., 3 p.c. deb. stock, due 1953, £1,923,287-0-0.....	9,359,997	9,359,997	London.
2. Canadian Northern Rly. Co., 3½ p.c. deb. stock, due 1958, £1,622,586-19-9.....	7,896,590	7,896,546	1
3. Canadian Northern Ontario Rly. Co., 3½ p.c. deb. stock, due 1961, £7,350,000-0-0.....	35,770,000	34,229,997	London.
4. Canadian Northern Alberta Rly. Co., 3½ p.c. deb. stock, due 1960, £647,260-5-6.....	3,150,000	3,149,999	London.
5. Grand Trunk Pacific Rly. Co., 3 p.c. bonds, due 1962, £14,000,000-0-0.....	68,040,000	34,992,000	London, New York, and Canada.
6. Canadian Northern Alberta Rly. Co., 3½ p.c. deb. stock, due 1962, £733,561-12-10.....	3,570,000	—	London and Canada.
7. Grand Trunk Pacific Rly. Co., 4 p.c. bonds, due 1962, £3,280,000-0-0.....	15,940,800	8,440,848	London, New York, and Canada.
8. Canadian Northern Rly. Co., 6½ p.c. bonds, due 1946.....	25,000,000	24,238,000	New York.
9. Canadian National Rly. Co., 5 p.c. serial equipment bonds, 1923-38.....	22,500,000	2,250,000	Canada.
10. Canadian National Rly. Co., 5 p.c. bonds, due 1954	50,000,000	50,000,000	Canada.
11. Canadian National Rly. Co., 1927, 2 p.c. guar. deb. stock, £7,176,801-0-0.....	34,927,098	24,205,685	London.
12. Canadian National Rly. Co., 4½ p.c. gold bonds, due 1957.....	65,000,000	65,000,000	New York and Canada.
13. Canadian National Rly. Co., 5 p.c. gold bonds, due July 1, 1969.....	60,000,000	60,000,000	London, New York, and Canada.
14. Canadian National Rly. Co., 5 p.c. gold bonds, due Oct. 1, 1969.....	60,000,000	60,000,000	London, New York, and Canada.
15. Canadian National Rly. Co., 5 p.c. gold bonds, due 1970.....	18,000,000	18,000,000	London, New York, and Canada.
16. Canadian National Rly. Co., 4½ p.c. gold bonds, due 1955.....	50,000,000	50,000,000	London, New York, and Canada.
17. Canadian National Rly. Co., 4½ p.c. gold bonds, due 1956.....	70,000,000	70,000,000	London, New York, and Canada.
18. Canadian National Rly. Co., 4½ p.c. gold bonds, due 1951.....	50,000,000	50,000,000	London, New York, and Canada.
19. Canadian National Rly. Co., 3 p.c. bonds, due 1950	20,500,000	20,500,000	Canada.
20. Canadian National Rly. Co., 2 p.c. bonds, due 1938	13,400,000	13,400,000	Canada.
21. Canadian National Rly. Co., 3 p.c. bonds, due 1944	35,000,000	35,000,000	Canada.
22. Canadian National Rly. Co., 2 p.c. bonds, due 1943	55,000,000	55,000,000	Canada.
23. Canadian National Rly. Co., 3 p.c. bonds, due 1953	25,000,000	25,000,000	Canada.
24. Canadian National Rly. Co., 2½ p.c. bonds, due 1944.....	15,500,000	15,500,000	Canada.
25. Canadian National Rly. Co., 3 p.c. bonds, due 1952	20,000,000	20,000,000	Canada.
Totals.....	833,554,485	756,163,072	

¹ Part of this issue is payable in Canada, part in London, and the balance in London and Canada.

² Additional railway securities guaranteed as to principal and interest to the value of \$45,657,952 were held by the Minister of Finance as at Mar. 31, 1937, but these are not outstanding in the same sense as those in the hands of the public.

22.—Securities Guaranteed by the Dominion Government, as at Mar. 31, 1937—concluded.

Security.	Amount of Guarantee Authorized.	Amount Outstanding and Held by the Public as at Mar. 31, 1937.	Where Payable.
	\$	\$	
Railway Securities Guaranteed as to Interest Only—			
26. Grand Trunk Rly., Acquisition Guarantees—			
Grand Trunk 4 p.c. perp. guar. stock, £12,500,000	60,833,333	60,833,333	London.
Grand Trunk 5 p.c. perp. deb. stock, £4,270,375	20,782,492	20,782,492	London.
Great Western 5 p.c. perp. deb. stock, £2,723,080	13,252,323	13,252,323	London.
Grand Trunk 4 p.c. perp. deb. stock, £24,624,455	119,839,014	119,839,014	London.
Northern Rly. of Canada, 4 p.c. perp. deb. stock, £308,215.....	1,499,980	1,499,980	London.
Totals	216,207,142	216,207,142	
Other Securities Guaranteed as to Principal and Interest—			
27. Harbour Commissioners of Montreal, Montreal South Shore Bridge 5 p.c. bonds due 1969.....	19,500,000	19,000,000	London, New York, and Canada.
28. Canadian National (West Indies) Steamships Ltd., 5 p.c. bonds, due 1955.....	10,000,000	9,400,000	London, New York, and Canada.
29. Saint John Harbour Commission—			
(a) Bonded indebtedness of the city of Saint John, assumed by the Commission.....	1,467,165	1,197,642	\$219,000 payable in London, New York, and Canada; balance in Canada.
(b) Debentures of the Commission issued to the city of Saint John, due 1952.....	667,953	667,953	Canada.
30. New Westminster Harbour Commissioners 4½ p.c. debentures due 1948.....	700,000	700,000	New York and Canada.
Totals	32,335,118	30,965,595	
Other Guarantees—			
31. Bank advances, <i>re</i> Province of Manitoba Savings Office.....	12,442,400	7,062,988	Canada.
32. Bank advances, <i>re</i> Government of Newfoundland	625,000	625,000	Canada.
33. Bank advances, <i>re</i> Dominion Steel and Coal Corporation (order for steel rails).....	1,100,000	142,965	Canada.
34. Province of British Columbia Treasury Bills....	626,534	626,534	Canada.
35. Province of Manitoba Treasury Bills.....	5,894,127	5,628,764	Canada.
36. Loans made by approved lending institutions under the Home Improvement Loans Guarantee Act.....	7,500,000	360,803	Canada.
37. Bank advances, <i>re</i> Grain Marketing—			
Canadian Co-operative Wheat Producers, Ltd. (Saskatchewan Oats Acct.).....	—	389,114	Canada.
The Canadian Wheat Board.....	60,000,000	—	
38. Winnipeg Grain and Produce Clearing Association Ltd. Day to day margins of the Canadian Wheat Board (closed out daily).....	Unstated.	—	Canada.
Bank of Canada—			
39. Deposits maintained by the chartered banks in Bank of Canada.....	Unstated.	194,275,314	Canada.

Section 2.—Provincial Public Finance.*

Provincial Governments in Canada are in the position, under Sec. 118 of the British North America Act, 1867 (30 and 31 Vict., c. 3), and the British North America Act, 1907 (7 Edw. VII, c. 11), of having a considerable assured income in subsidies from the Dominion Treasury. Details of these payments are given for recent years at pp. 855-857 of this chapter. In addition, through their retention of ownership of their lands, minerals, and other natural resources, those provinces that, by the voluntary action of their previously existing governments, entered Confederation, raise considerable revenues through land sales, sales of timber, mining royalties, leases of water powers, etc., while the Prairie Provinces, though having controlled their own natural resources since 1930, formerly received from the Dominion special grants in lieu of land revenues. Further, under Sec. 92 of the British North America Act, Provincial Legislatures are given authority to impose direct taxation within the province for provincial purposes and to borrow money on the sole credit of the province. The total revenues received by Provincial Governments for their fiscal years ended 1936 are analysed by source in Table 23.

Prior to the opening of the present century, provincial receipts and expenditures were generally moderate, as may be seen, both for individual provinces and for the provinces collectively, from Tables 25 and 26. The demand, more especially in Ontario and the West, for increased services from governments, particularly in respect of education, sanitation, and public ownership and operation of public utilities, and the performance of these functions, necessitated increased revenues, which had in the main to be raised by taxation. Among the chief methods of taxation to be employed has been the taxation of corporations and estates, succession duties showing a considerably increased yield even within the comparatively short period of twenty years from 1916 to 1936 covered by the statements compiled by the Finance Branch of the Bureau of Statistics.† The fact that provincial government is cheaper per head in the eastern provinces (although both Ontario and Nova Scotia have shown large per capita increases in recent years) is evident from Table 26, which gives the per capita ordinary revenue and expenditure for various fiscal years, from 1871 to 1936. This, however, is not to be taken as evidence that the larger services rendered to the public are not worth what is being paid for them.

For the half-century subsequent to Confederation, the provincial accounts, published by each Government according to its own system of accounting, were quite incomparable as among the provinces, a fact much regretted by students of provincial public finance. Upon the creation of the Dominion Bureau of Statistics in 1918, its Finance Branch undertook the work of placing the various provincial public accounts on a comparable basis, correlating, for example, the revenue derived from succession duties, taxation of corporations, sales of public lands, royalties on forest, mineral and fisheries products, as well as the expenditures on such services as agriculture, civil government, education, and public works. As the result of the Bureau's exhaustive analysis of the provincial public accounts, a summary statement of the ordinary receipts and expenditures of the Provincial Governments appeared for the first time in the 1919 Year Book. The various items of receipts

*Revised by Col. J. R. Munro, Chief of the Finance Branch of the Dominion Bureau of Statistics. This Branch issues detailed statements on Provincial Finance which may be obtained from the Dominion Statistician. For a list of these publications see Section 1 of Chapter XXIX.

†The succession duties collected by the provinces in 1936 amounted in the aggregate to \$19,948,365, as compared with \$1,020,972 as recently as 1904, or an increase of more than 19-fold in 32 years. The aggregate revenue raised by taxation of corporations, land, income and miscellaneous (exclusive of gasoline taxes, succession duties and amusement taxes), increased from \$7,217,548 in 1916 to \$39,825,639 in 1936, an increase of 552 p.c. in 20 years.

and expenditures were classified under appropriate headings and a uniform terminology was adopted. From these statements it is possible to ascertain the amounts received and expended in each year under the respective headings for each province, as well as for the provinces collectively. The figures for the years 1916 to 1920 will be found on pp. 680-685 of the 1921 Year Book, those for 1921 on pp. 786-791 of the 1922-23 Year Book and those for 1922 to 1926 on pp. 836-841 of the 1927-28 Year Book.

The Bureau now makes more extensive analyses of the finances of the provinces, including capital and trust accounts as well as ordinary revenue and expenditure. These analyses are based on a uniform classification adopted at a conference held in 1933 between provincial treasury officials and the Dominion Bureau of Statistics.

Data for 1936 are given on the new uniform basis in Tables 23 and 24.

Subsection 1.—Provincial Revenues and Expenditures.

Ordinary Revenues and Expenditures.—The total ordinary revenues and expenditures of the provinces for their individual fiscal years are shown in Table 25, pp. 874-875, for the census years 1871-1911 and for each year from 1916-36. Tables 23 and 24 on pp. 870-873 show detailed ordinary revenues and expenditures for 1936. While revenues have grown very rapidly over the period covered in Table 25, expenditures have more than kept pace.

Some explanation is perhaps necessary in regard to the Capital Receipts and Expenditures and the Trust and Public Charities Funds Receipts and Expenditures shown in the lower parts of Tables 23 and 24. In regard to the former, receipts represent the proceeds of loans and borrowings in the form of bonds, debentures, and treasury bills and are largely offset by capital payments for debt retirements; there are, however, receipts from the Dominion Government in regard to old age pensions and unemployment relief which are regarded as capital receipts. Finally, refunds of capital expenditures, made earlier in the form of advances or loans, are also included under this heading.

With regard to the Trust and Public Charities Funds accounts, these, as will be noted, relate chiefly to the province of Quebec where, under the Public Charities Act, parts of the revenues derived from Liquor Commission profits, taxes on amusements and race tracks, and the hospital tax on meals are transferred to the Public Charities Fund for the benefit of hospitals, sanatoria, refuges, and other charitable institutions. In Quebec and Manitoba there are also judicial deposits in connection with appeals, sales by the sheriff, etc., which are made to the Trust Funds accounts, and Prince Edward Island shows small Trust Fund receipts. Since 1916, *i.e.*, in the short space of 20 years, while total revenues of all provinces have shown an increase of 365 p.c., ordinary expenditures have increased 361 p.c.

The Growth of Provincial Taxation.—Whereas in earlier years the Dominion subsidies, together with the revenues arising out of the natural resources of the provinces and from fees for specific services rendered to the citizens, nearly sufficed to cover the whole expenses of government and rendered a resort to taxation for provincial purposes practically unnecessary in most of the provinces, the great increase in the functions of government since the commencement of the present

century has put an end to this state of affairs. The aggregate amount of taxation for provincial purposes in the fiscal years prior to 1916 is unfortunately not available. Since that time provincial taxation has increased, according to the recently amended classification made in the Dominion Bureau of Statistics, from \$12,521,816 in 1916 to \$95,826,440 in 1936, exclusive of motor vehicle licences, liquor traffic profits, and other licences and permits, etc., an almost eight-fold increase in 20 years.

The increase in the use of automobiles, both for commercial purposes and pleasure, is clearly demonstrated by the growing revenues from licences and permits issued by the Provincial Governments. In 1921 the total revenue of all provinces from automobile licensing alone amounted to \$7,857,751. It has since fluctuated considerably, reaching \$21,735,827 in 1929 but declining to \$19,952,575 in 1931. The revenue from this source in 1936 was \$22,854,410.

The gasoline tax is now generally adopted as a means of increasing provincial receipts and has proved to be a lucrative source of revenue. In 1923 only Manitoba and Alberta showed gasoline-tax revenue, the total being \$280,404. In 1924 the five provinces of Prince Edward Island, Quebec, Manitoba, Alberta, and British Columbia collected such revenue to the amount of \$559,543, while in 1925 the same provinces, with Ontario added, collected \$3,521,388. In 1926 all provinces, except Saskatchewan, collected gasoline taxes to the amount of \$6,104,716, in 1927 to \$7,615,907, and in 1928 to \$9,151,735; thereafter, gasoline taxes were collected in all provinces and amounted to \$17,237,017 in 1929, \$20,956,590 in 1930, \$23,859,067 in 1931, \$24,987,273 in 1932, \$25,931,480 in 1933, \$26,812,275 in 1934, \$20,474,977* in 1935, and in 1936 to \$32,310,353. The higher yields in recent years, however, were due partly to higher rates of taxation.

The provincial revenues from the liquor traffic increased considerably between 1925 and 1930, but subsequently declined until 1934, again increasing in 1936. The adoption of government control of the sale of liquor in one province after another, until now it exists in all but Prince Edward Island where prohibition is still in force, has resulted in trading profits, licensing revenues, and permit fees, all of which have swelled the provincial revenues. Prior to the adoption of government control, such revenues were not available to the provinces. In 1925 the total revenue collected by all provinces from the liquor traffic was \$8,964,824; in 1926 it was \$11,609,392, increasing to \$27,599,687 by 1929. In 1933 such revenue amounted to \$16,160,980, in 1934 to \$12,814,120, in 1935 to \$12,886,197, and in 1936 to \$19,338,366. The figures shown in Table 23 include liquor permits and licences amounting to \$2,217,307 and other items amounting to \$11,166, the corresponding amounts being shown under "Licences and Permits" in former years. The method of control varies somewhat as between the provinces. In the majority of cases there are independent commissions or boards to administer the provincial Liquor Traffic Acts, but the accounting and trading profits are shown somewhat differently in the various provincial public accounts reports.†

Fiscal Years of the Provinces.—The fiscal years of the provinces are as follows: P.E.I., Dec. 31; N.S., Sept. 30 prior to 1935 and Nov. 30 thereafter; N.B., Oct. 31; Que., June 30; Ont., Oct. 31 prior to 1935 and Mar. 31 thereafter; Man. and Sask., Apr. 30; Alta. and B.C., Mar. 31.

* The wide difference between the figure for 1935 and the one for 1936 is accounted for largely by the change in the fiscal year for the province of Ontario from Oct. 31 to Mar. 31, so that the Ontario figures for 1935 included in the 1935 total were for five months only.

† See Chapter XVII, pp. 626-629, and also the report of the Dominion Bureau of Statistics on "The Control and Sale of Liquor in Canada".

23.—Ordinary, Capital, and Trust and Charity Revenues of

(AMENDED UNIFORM

NOTE.—For information as to when the fiscal years

Item.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	\$	\$	\$	\$	\$
Ordinary Revenues—					
Subventions and grants.	845,954	3,723,302	1,922,928	2,685,036	3,073,635
Taxation.	654,342	4,052,371	2,485,053	17,423,207	39,617,496
Royalties, duties and dues.	Nil	641,878	422,316	4,990,476	2,213,473
Licences and permits.	114,917	1,263,028	1,137,810	6,783,156	9,885,862
Fees.	35,527	294,806	121,362	1,295,032	1,979,364
Liquor traffic control.	40,000	1,119,771	782,742	3,898,899	8,335,000
Fines and penalties.	2,281	15,877	9,204	372,878	124,783
Profits from trading activities.	Nil	68,814	31,948	Nil	Nil
Interest.	Nil	939,684	130,723	1,041,790	11,372,186
Refunds of expenditure.	897	Nil	3,582	601,855	10,580,536
Agriculture and public domain.	1,282	84,785	Nil	1,185,496	670,142
Institutional revenue.	12,152	562,779	262,306	192,159	1,937,644
Other.	11,114	74,171	20,168	27,047	531,775
Totals, Ordinary Revenues.	1,718,466	12,841,266	7,330,142	40,497,031	90,321,896
Capital Receipts—					
Proceeds of loans and borrowings.	775,000	8,211,038	13,123,433	72,928,000	101,709,354
Sinking funds and investments (earnings, sale of, etc.)	201,799	776,735	23,468	Nil	1,832,396
Provincial Savings Office.	Nil	Nil	Nil	Nil	15,739,721
Dominion Government.	281,605	1,323,244	1,176,802	8,623,613	13,292,930
Sale of property or other capital assets.	Nil	16,964	Nil	Nil	213,308
Refunds of expenditure or repayment of advances or loans.	2,467	729,874	90,151	5,516,049	22,506,934
Agriculture and public domain.	Nil	Nil	Nil	Nil	100,911
Other.	Nil	Nil	52,500	928	454,109
Totals, Capital Receipts.	1,260,871	11,057,855	14,466,354	87,068,590	155,849,663
Trust and Public Charities Funds Receipts—					
Marriage licences.	Nil	—	—	12,108	—
Public charities fund.	Nil	—	—	4,488,050	—
Fund for promotion of health.	Nil	—	—	Nil	—
Deposits, guarantees, etc.	Nil	—	—	3,509,655	—
Other.	23,517	—	—	3,432,999	—
Totals, Trust and Public Charities Funds Receipts	23,517	Nil	Nil	11,442,812	Nil

Provincial Governments for their respective fiscal years ended 1936.

CLASSIFICATION.)

of the various provinces end, see text at foot of p. 869.

Item.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.
	\$	\$	\$	\$	\$
Ordinary Revenues—					
Subventions and grants.....	3,913,332	4,679,901	3,460,138	3,316,339	27,620,565
Taxation.....	7,008,170	5,627,755	5,501,108	13,456,938	95,826,440
Royalties, duties and dues.....	306,457	294,356	669,632	2,216,483	11,755,071
Licences and permits.....	1,129,727	1,604,105	1,703,094	3,430,434	27,052,133
Fees.....	456,556	724,799	974,634	784,790	6,666,870
Liquor traffic control.....	1,204,686	1,280,345	1,843,589	3,061,808	21,566,840
Fines and penalties.....	52,436	39,083	43,743	76,669	736,954
Profits from trading activities.....	2,711	45,533	5,280	23,969	178,255
Interest.....	1,965,953	2,544,104	944,844	425,620	19,364,904
Refunds of expenditure.....	59,553	171,664	861,343	702,203	12,981,633
Agricultural and public domain.....	56,868	222,431	88,972	643,874	2,953,850
Institutional revenue.....	222,625	127,257	362,760	752,276	4,431,958
Other.....	36,919	477,359	177,515	124,641	1,480,709
Totals, Ordinary Revenues.	16,415,993	17,838,692	16,636,652	29,016,044	232,616,182
Capital Receipts—					
Proceeds of loans and borrowings.....	7,726,995	70,240,052	29,018,947	25,622,900	329,355,719
Sinking funds and investments (earnings, sale of, etc.).....	526,051	2,000	2,731,297	Nil	6,093,746
Provincial Savings Office.....	Nil	Nil	Nil	Nil	15,739,721
Dominion Government.....	3,293,911	2,944,312	1,811,867	2,250,911	34,999,195
Sale of property or other capital assets.	Nil	760	14,564	Nil	245,596
Refunds of expenditure or repayment of advances or loans.....	2,905,826	2,727,856	1,578,784	911	36,058,852
Agriculture and public domain.....	30,299	Nil	Nil	Nil	131,210
Other.....	5,422,760	1,533,467	29,929	Nil	7,493,693
Totals, Capital Receipts....	19,905,842	77,448,417	35,185,388	27,874,722	430,117,732
Trust and Public Charities Funds Receipts—					
Marriage licences.....	Nil	-	-	-	12,108
Public charities fund.....	Nil	-	-	-	4,488,050
Fund for promotion of health.....	Nil	-	-	-	Nil
Deposits, guarantees, etc.....	274,398	-	-	-	3,784,053
Other.....	143,733	-	-	-	3,600,249
Totals, Trust and Public Charities Funds Receipts	418,131	Nil	Nil	Nil	11,884,460

24.—Ordinary, Capital, and Trust and Charity Expenditures of

(AMENDED UNIFORM

NOTE.—For information as to when the fiscal years

Item.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	\$	\$	\$	\$	\$
Ordinary Expenditures—					
Debt charges.....	414,555	4,061,260	3,417,617	9,517,359	32,492,548
Legislation.....	18,804	60,741	76,911	1,029,641	322,238
Administration and general government	168,596	629,423	436,429	5,131,154	5,754,383
Education.....	329,664	1,308,263	712,540	4,329,381	9,771,883
Legal and judicial administration.....	65,272	152,348	179,861	3,953,728	2,070,980
Transportation and communications...	255,103	1,946,739	1,164,350	8,049,692	5,489,377
Agriculture and public domain.....	28,952	545,745	525,640	6,704,806	2,860,705
Public welfare.....	435,074	3,888,766	1,237,211	2,772,858	44,800,855
Other.....	27,100	96,263	4,552	931,588	101,633
Totals, Ordinary Expenditures	1,743,120	12,689,548	7,755,111	42,420,207	103,664,602
Capital Payments—					
Public debt retirement.....	775,000	1,975,785	5,973,667	49,228,400	100,810,768
Loans and advances, realizable assets..	33,765	108,999	891,915	274,937	939,505
Administration and general government	24,197	724,503	21,000	970,379	881,581
Education.....	Nil	7,786	Nil	1,210	65,979
Administration of Justice building.....	Nil	Nil	Nil	3,435	Nil
Transportation and communications...	54,802	5,667,743	6,040,052	8,488,973	7,221,570
Agriculture and public domain.....	22,072	62,906	Nil	173,170	345,227
Public welfare.....	531,734	2,605,481	837,752	23,694,489	24,679,413
Other.....	10,169	Nil	701,968	Nil	161,343
Totals, Capital Payments.....	1,451,739	11,153,203	14,466,354	82,834,993	135,105,386
Trust and Public Charities Funds Payments—					
Sinking funds, municipal, school corpor- ations and banks.....	Nil	-	-	2,971,226	-
Education.....	Nil	-	-	12,184	-
Public welfare.....	Nil	-	-	6,631,237	-
Deposits, judicial and other.....	Nil	-	-	1,965,823	-
Other.....	10,062	-	-	100,343	-
Totals, Trust and Public Char- ities Funds Payments.....	10,062	Nil	Nil	11,680,813	Nil

Provincial Governments for their respective fiscal years ended 1936.

(CLASSIFICATION.)

of the various provinces end, see text at foot of p. 869.

Item.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.
	\$	\$	\$	\$	\$
Ordinary Expenditures—					
Debt charges.....	6,792,758	6,900,590	7,338,568	8,957,828	79,893,083
Legislation.....	133,850	178,405	356,120	161,923	2,338,633
Administration and general government	774,526	1,588,255	1,426,582	2,221,277	18,130,625
Education.....	1,731,313	3,117,762	2,578,938	3,628,719	27,508,463
Legal and judicial administration.....	757,342	902,567	838,681	1,524,295	10,445,074
Transportation and communications....	661,676	807,165	726,054	2,091,625	21,191,781
Agriculture and public domain.....	702,317	631,459	677,060	1,846,183	14,522,867
Public welfare.....	4,707,155	4,702,519	4,167,238	5,950,075	72,661,751
Other.....	33,357	61,885	178,209	14,944	1,449,531
Totals, Ordinary Expenditures	16,294,294	18,890,607	18,287,450	26,396,869	248,141,808
Capital Payments—					
Public debt retirement.....	6,199,331	54,005,687	20,892,343	7,996,000	247,856,981
Loans and advances, realizable assets..	1,540,497	918,595	4,842,125	130,000	9,680,338
Administration and general government	4,861	Nil	19,277	Nil	2,645,798
Education.....	Nil	Nil	5,996	Nil	80,971
Administration of Justice building.....	Nil	Nil	4,202	Nil	7,637
Transportation and communications....	96,684	748,644	1,405,453	513,817	30,237,738
Agriculture and public domain.....	3,639	Nil	130,130	Nil	737,144
Public welfare.....	6,643,151	20,270,102	4,511,033	10,640,323	94,413,478
Other.....	5,179,657	1,505,419	1,987,169	Nil	9,545,725
Totals, Capital Payments	19,667,820	77,448,447	33,797,728	19,280,140	395,205,810
Trust and Public Charities Funds Payments—					
Sinking funds, municipal, school corporations and banks.....	74,437	—	—	—	3,045,663
Education.....	Nil	—	—	—	12,184
Public welfare.....	Nil	—	—	—	6,631,237
Deposits, judicial and other.....	153,425	—	—	—	2,119,248
Other.....	103,363	—	—	—	213,768
Totals, Trust and Public Charities Funds Payments	331,225	Nil	Nil	Nil	12,022,100

25.—Ordinary Revenues and Expenditures of the Provincial Governments for their respective fiscal years ended in the census years 1871-1911 and in each year from 1916-36.

NOTE.—For provincial ordinary revenues and expenditures in all other provincial fiscal years since Confederation, see 1932 Year Book, pp. 734-736.

Fiscal Year.	Prince Edward Island.		Nova Scotia.		New Brunswick.		Quebec.	
	Revenue.	Expenditure. ¹	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.
	\$	\$	\$	\$	\$	\$	\$	\$
1871.....	385,014	406,236	525,824	600,344	451,076	438,407	1,632,032	1,575,545
1881.....	275,380	261,276 ²	476,445	494,582	607,445	598,844	3,191,779	3,566,612
1891.....	274,047	304,486	661,541	692,538	612,762	680,813	3,457,144	4,095,520
1901.....	309,445	315,326	1,090,230	1,088,927	1,031,267	910,346	4,563,432	4,916,554
1911.....	374,798	398,490	1,625,653	1,790,778	1,347,077	1,403,547	7,032,745	6,424,900
1916.....	508,455	453,151	2,165,338	2,152,773	1,580,419	1,568,340	9,647,984	9,436,687
1917.....	496,053	487,113	2,118,620	2,344,009	1,572,814	2,166,904	10,441,114	9,907,672
1918.....	514,475	484,416	2,332,634	2,573,797	2,357,909	2,399,082	13,806,392	11,671,830
1919.....	501,915	655,409	3,280,313	3,280,282	2,182,420	2,595,937	12,666,352	12,371,131
1920.....	740,973	660,774	3,801,016	3,916,848	3,100,892	2,969,323	14,472,651	13,520,740
1921.....	769,719	694,042	4,586,840	4,678,146	2,892,905	3,432,512	15,914,521	14,624,088
1922.....	748,888	687,241	4,791,208	4,791,998	3,226,727	2,985,877	21,609,396	16,575,977
1923.....	654,303	790,046	5,317,335	5,229,178	3,479,733	3,648,273	21,634,642	19,930,276
1924.....	738,431	715,882	5,461,383	5,579,525	3,725,286	3,835,522	23,170,733	21,567,293
1925.....	740,076	745,338	4,467,484	5,969,544	3,556,330	4,112,569	25,021,329	23,629,390
1926.....	832,551	756,114	5,744,575	6,327,043	4,206,853	4,078,775	27,206,335	26,401,480
1927.....	836,748	870,427	6,517,073	6,566,143	5,096,446	4,636,157	30,924,997	29,078,703
1928.....	1,034,782	943,548	6,933,630	7,543,078	5,290,098	5,393,784	34,807,733	32,821,226
1929.....	1,083,571	1,033,315	7,390,410	7,288,486	5,991,375	6,521,575	39,976,283	35,964,487
1930.....	1,148,749	1,133,366	7,682,066	7,900,987	6,583,726	7,218,556	43,585,142	39,374,910
1931.....	1,149,570	1,453,191	8,104,602	8,194,592	5,980,914	6,761,420	41,630,620	40,854,245
1932.....	1,206,026	1,277,401	8,874,095	9,037,199	6,495,573 ²	6,898,263	39,349,193	39,933,901
1933.....	1,263,063	1,392,275	8,013,463	9,632,347	5,691,138 ²	7,207,207	33,324,760	40,165,668
1934.....	1,355,777	1,656,924	8,876,505	10,168,838 ²	5,809,975 ²	6,434,035 ²	31,018,342	36,612,816
1935.....	1,535,709	1,912,006	13,642,410 ³	14,540,011 ³	6,486,481	7,189,598	35,195,579	40,134,814
1936.....	1,718,466	1,743,120	12,841,266	12,689,548	7,330,142	7,755,111	40,497,031	42,420,207

Fiscal Year.	Ontario.		Manitoba.		Saskatchewan.	
	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.
	\$	\$	\$	\$	\$	\$
1871.....	2,333,180	1,816,784	—	—	—	—
1881.....	2,788,747	2,592,800	121,867	226,808	—	—
1891.....	4,138,589	4,158,460	590,484	664,432	—	—
1901.....	4,466,044	4,038,834	1,008,653	988,251	—	—
1911.....	9,370,834	9,916,934	4,454,190	4,002,826	2,699,603	2,575,145
1916.....	13,841,339	12,709,333	5,897,807	6,147,780	4,801,064	5,258,756
1917.....	18,269,597	16,518,223	6,292,986	6,860,355	5,631,910	5,553,965
1918.....	19,270,122	17,460,404	6,723,013	7,307,727	7,797,153	6,828,596
1919.....	20,692,166 ⁴	21,464,575	8,613,364	8,497,942	8,333,759	8,125,203
1920.....	25,981,517 ⁴	25,880,843	9,870,710	10,602,955	9,903,885	8,707,833
1921.....	30,411,396 ⁴	28,579,688	9,358,956	10,063,139	11,789,920	12,151,665
1922.....	39,725,370 ⁴	37,458,395 ⁵	7,940,457	8,381,667	11,801,894	13,322,120
1923.....	34,818,729 ⁴	49,305,439	10,078,730	10,616,567	12,576,763	12,886,544
1924.....	41,721,961 ⁴	48,866,569	10,926,634	10,455,187	12,520,411	12,449,150
1925.....	48,013,852 ⁴	51,462,178	7,866,519 ⁶	6,824,155 ⁶	12,378,755	12,498,933
1926.....	52,039,855 ⁴	51,251,781	10,582,537	10,431,652	13,317,398	13,212,483
1927.....	56,306,225	55,763,689	11,592,758	10,446,285	13,050,217	12,962,217
1928.....	58,426,983	58,198,746	10,962,317	11,103,109	13,564,893	13,449,632
1929.....	64,549,718	61,906,824	12,150,490	12,344,493	16,096,666	15,971,231
1930.....	57,343,291 ⁷	57,989,353 ⁷	13,922,135	13,637,397	16,561,527 ⁸	17,079,469 ⁸
1931.....	54,390,092 ⁷	54,846,994 ⁷	13,842,511	14,491,673	14,346,010	18,202,677
1932.....	68,999,855 ⁹	71,060,654 ²	15,726,641	15,726,641	13,254,871	19,075,161
1933.....	67,800,543	67,324,117 ²	13,838,339	15,782,904	16,177,784	16,756,421
1934.....	61,426,934	103,578,686 ²	13,966,921	14,003,533	15,585,918 ²	16,979,911
1935.....	30,941,953 ¹⁰	41,382,625 ¹⁰	16,092,546	15,933,111	15,278,905	18,115,533
1936.....	90,321,896	103,664,602	16,415,993	16,294,294	17,838,692	18,890,607

¹ Includes expenditure on capital account, except for 1901.

² For fourteen months.

³ Revised since the publication of the 1937 Year Book.

⁴ Includes capital revenue for lands, which cannot be separated.

⁵ Includes capital expenditure which cannot be separated.

⁶ For eight months.

⁷ Exclusive of interest paid by Hydro and other commissions.

⁸ Certain minor items, amounting to about \$600,000, shown in previous years as ordinary receipts and expenditures, have been transferred to the extraordinary classification in the 1930 Provincial Accounts Report.

⁹ This figure is taken from the Public Accounts of Ontario.

¹⁰ For five months.

25.—Ordinary Revenues and Expenditures of the Provincial Governments for their respective fiscal years ended in the census years 1871-1911 and in each year from 1916-36—concluded.

Fiscal Year.	Alberta.		British Columbia.		Totals for All Provinces. ¹	
	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.
	\$	\$	\$	\$	\$	\$
1871.....	—	—	191,820 ²	97,692 ²	5,518,946	4,935,008
1881.....	—	—	397,035	378,779	7,858,698	8,119,701
1891.....	—	—	959,248	1,032,104	10,693,815	11,628,353
1901.....	—	—	1,605,920	2,287,821	14,074,991	14,146,059
1911.....	3,309,156 ³	3,437,088	10,492,892	8,194,803	40,706,948	38,144,511
1916.....	5,281,695	6,018,894	6,291,694	10,083,505	50,015,795	53,826,219
1917.....	6,260,106	6,752,504	6,906,784	9,531,740	57,989,984	60,122,485
1918.....	7,660,762	8,303,808	8,882,845	9,023,269	69,345,305	66,052,909
1919.....	9,642,739	9,525,749	10,931,279	9,887,745	76,844,307	76,402,973
1920.....	10,919,776	10,423,356	13,861,603	11,568,003	92,653,023	88,250,675
1921.....	11,086,937	13,109,304	15,219,264	15,236,931	102,030,458	102,569,515
1922.....	9,324,890	11,235,192	16,987,889	17,436,487	116,156,699	112,874,954
1923.....	10,419,146	10,990,830	18,758,864	19,273,942 ⁴	117,738,245	132,671,095
1924.....	10,506,627	11,174,690	19,124,580	20,515,367 ⁴	127,896,047	135,159,185
1925.....	11,531,026	11,249,433	18,823,358	20,156,702 ⁴	132,398,729	136,648,242
1926.....	11,912,128	11,894,328	20,608,672	19,829,522 ⁴	146,450,904	144,183,178
1927.....	12,263,401	12,479,381	20,257,916	19,408,881 ⁴	156,845,780	152,211,883
1928.....	16,149,896 ⁵	15,870,133 ⁵	20,939,123	20,215,655 ⁴	168,109,505	165,538,910
1929.....	15,265,084	13,686,261	21,094,427	22,825,520 ⁴	183,598,024	177,542,192
1930.....	15,829,865	15,402,885	25,498,409	25,066,980 ⁴	188,154,910	184,804,203
1931.....	15,710,962	18,017,544	23,988,199	27,931,866 ⁴	179,143,480	190,754,202
1932.....	13,492,430	18,645,481	25,682,892	32,734,453	193,081,576 ⁶	214,389,154 ⁶
1933.....	15,426,265	17,533,786	23,333,115	26,169,492	184,868,470 ⁶	200,527,219 ⁶
1934.....	15,178,607	17,056,639	22,618,367	22,992,344	175,867,349 ⁶	229,483,726 ⁶
1935.....	15,790,170	17,528,221	25,603,942	24,439,767	160,567,695	181,175,686
1936.....	16,636,652	18,287,450	29,016,044	26,396,869	232,616,182	248,141,808

¹ See footnotes to figures for individual provinces when using these figures.

² Six months.

³ Includes small sums of capital revenue and expenditure which cannot be separated.

⁴ Includes sinking

funds taken from capital expenditure (expenditure out of income).

⁵ Fifteen months ended Mar. 31,

1928.

⁶ Revised since the publication of the 1937 Year Book.

26.—Ordinary Revenues and Expenditures of Provincial Governments per Head of Population for their respective fiscal years ended in the census years 1871-1911 and in each year from 1916-36.

NOTE.—Per capita figures are calculated on the basis of the population figures given on p. 155.

ORDINARY REVENUES.

Fiscal Year.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Average for All Provinces.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1871.....	4.10	1.36	1.58	1.37	1.44	—	—	—	5.31 ¹	1.50
1881.....	2.53	1.10	1.90	2.35	1.45	1.97	—	—	8.10	1.82
1891.....	2.51	1.49	1.91	2.32	1.96	3.86	—	—	9.79	2.21
1901.....	3.00	2.37	3.12	2.77	2.05	3.96	—	—	8.97	2.62
1911.....	3.99	3.30	3.83	3.51	3.71	9.66	5.49	8.85 ²	26.70	5.65
1916.....	5.53	4.29	4.29	4.48	5.10	10.65	7.41	10.65	13.80	6.25
1917.....	5.51	4.21	4.27	4.81	6.71	11.28	8.51	12.32	14.88	7.19
1918.....	5.78	4.65	6.39	6.30	7.02	11.90	11.50	14.67	18.74	8.51
1919.....	5.64	6.47	5.85	5.67	7.42 ³	14.93	11.01	17.82	22.40	9.25
1920.....	8.33	7.37	8.14	6.30	9.07 ³	16.62	13.59	19.33	27.34	10.83
1921.....	8.65	8.75	7.46	6.74	10.37 ³	15.34	15.57	18.85	28.99	11.61
1922.....	8.41	9.18	8.29	9.00	13.33 ³	12.89	15.35	15.75	31.40	13.02
1923.....	6.37	10.27	8.95	8.84	11.56 ³	16.28	16.17	17.57	33.80	13.07
1924.....	8.59	10.58	9.53	9.29	13.64 ³	17.48	15.83	17.60	33.49	13.99
1925.....	8.61	8.67	9.05	9.82	15.43 ³	12.45 ⁴	15.36	19.15	32.01	14.25
1926.....	9.57	11.15	10.62	10.45	16.45 ³	16.56	16.22	19.59	34.01	15.50
1927.....	9.62	12.65	12.81	11.64	17.49	17.81	15.52	19.37	32.52	16.28
1928.....	11.76	13.46	13.19	12.82	17.82	16.51	15.74	24.54 ⁵	32.67	17.09
1929.....	12.31	14.35	14.83	14.42	19.36	17.95	18.23	22.32	32.01	18.31
1930.....	13.05	14.95	16.22	14.43	16.94 ⁶	20.21	18.34 ⁷	22.36	37.72	18.43
1931.....	13.06	15.80	14.66	14.48	15.85 ⁶	19.77	15.56	21.46	34.56	17.27
1932.....	13.55	17.10	15.73 ⁸	13.52	19.86 ^{8,9}	22.18	14.21	18.23	36.48	18.13
1933.....	14.19	15.35	13.57 ⁸	11.22	19.02	19.49	17.36	20.62	32.77	17.31
1934.....	15.57	16.91	13.65 ⁸	10.28	16.93	19.64	16.72	20.08	31.20	16.22
1935.....	17.26	25.89 ¹⁰	15.12	11.49	8.42 ¹¹	22.63	16.41	20.67	34.84	14.68
1936.....	18.68	23.91	16.85	13.08	24.48	23.09	19.16	21.55	38.69	21.09

¹ For six months.

² Includes small sums of capital revenue and expenditure which cannot be separated.

³ Includes capital revenue for lands, which cannot be separated.

⁴ For eight months.

⁵ For fifteen months ended Mar. 31, 1928.

⁶ Exclusive of interest paid by Hydro and other commissions.

⁷ Certain minor items, amounting to about \$600,000, shown in previous years as ordinary receipts and expenditures, have been transferred to the extraordinary classification in the 1930 Provincial Accounts Report.

⁸ Revised since the publication of the 1937 Year Book.

⁹ This figure is taken from the Public Accounts of Ontario.

¹⁰ Fourteen months.

¹¹ Five months.

26.—Ordinary Revenues and Expenditures of Provincial Governments per Head of Population for their respective fiscal years ended in the census years 1871-1911 and in each year from 1916-36—concluded.

ORDINARY EXPENDITURES.

Fiscal Year.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Average for All Provinces.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1871.....	4.32	1.55	1.53	1.32	1.12	—	—	—	2.69 ¹	1.34
1881.....	2.40	1.12	1.87	4.47	1.35	3.66	—	—	7.71	1.89
1891.....	2.79	1.54	2.12	2.75	1.97	4.34	—	—	10.53	2.41
1901.....	3.06	2.37	2.75	2.74	1.85	3.88	—	—	12.78	2.63
1911.....	4.24	3.64	3.99	3.20	3.92	8.68	5.23	9.19	20.85	5.29
1916.....	4.93	4.26	4.26	4.38	4.68	11.10	8.12	12.13	22.11	6.73
1917.....	5.41	4.66	5.89	4.57	6.06	12.29	8.39	13.29	20.54	7.46
1918.....	5.44	5.13	6.50	5.33	6.36	12.93	10.07	15.91	19.04	8.11
1919.....	7.36	6.47	6.96	5.54	7.70	14.73	11.61	17.61	20.26	9.19
1920.....	7.42	7.59	7.79	5.88	9.04	17.85	11.94	18.45	22.82	10.31
1921.....	7.80	8.93	8.85	6.19	9.74	16.50	16.05	22.29	29.02	11.67
1922.....	7.72	9.18	7.68	6.88	12.57 ²	13.61	17.32	18.98	32.23	12.66
1923.....	9.08	10.09	9.38	8.15	16.36	17.15	16.56	18.53	34.73 ³	14.72
1924.....	8.32	10.81	9.81	8.64	15.97	16.73	15.74	18.72	35.93 ³	14.78
1925.....	8.67	11.59	10.46	9.27	16.54	10.80 ⁴	15.51	18.69	34.29 ³	14.70
1926.....	8.69	12.29	10.30	10.14	16.20	16.32	16.09	19.56	32.72 ³	15.26
1927.....	10.00	12.75	11.65	10.94	17.32	16.05	15.41	19.71	31.15 ³	15.80
1928.....	10.72	14.65	13.45	12.09	17.75	16.72	15.60	24.12 ⁵	31.54 ³	16.83
1929.....	11.74	14.15	16.14	13.00	18.57	18.23	18.09	20.01	34.64 ³	17.70
1930.....	12.88	15.37	17.78	13.94	17.13 ⁶	19.79	18.91 ⁷	21.75	37.08 ³	18.10
1931.....	16.51	15.97	16.57	14.22	15.98 ⁸	20.70	19.74	24.61	40.25 ³	18.38
1932.....	14.35	17.41	16.70	13.72	20.45 ^{8,9}	22.18	20.44	25.20	46.50	19.77
1933.....	15.64	18.45	13.74	13.52	18.89	22.23	17.98	23.44	36.75	18.77
1934.....	18.62	19.37 ⁸	15.14 ⁸	12.13	28.54 ⁸	19.70	18.22	22.56	31.71	20.11
1935.....	21.48	27.59 ¹⁰	16.76	13.11	11.27 ¹¹	22.41	19.46	22.94	33.25	16.57
1936.....	18.95	23.63	17.83	13.70	28.09	22.92	20.29	23.69	35.20	22.50

¹ For six months.

² Includes capital expenditure which cannot be separated.

³ Includes

sinking funds taken from capital expenditure (expenditure out of income). ⁴ For eight months. ⁵ For

fifteen months ended Mar. 31, 1928. ⁶ Exclusive of interest paid by Hydro and other commissions.

⁷ Certain minor items, amounting to about \$600,000, shown in previous years as ordinary receipts and expenditures, have been transferred to the extraordinary classification in the 1930 Provincial Accounts Report.

⁸ Revised since the publication of the 1937 Year Book. ⁹ This figure is taken from the Public

Accounts of Ontario. ¹⁰ For fourteen months.

¹¹ For five months.

Subsection 2.—Provincial Debts and Assets.

Bonded Indebtedness of the Provinces.—Of the total liabilities of the provinces the major part is represented by bonded debt owing to the public in Canada and abroad. The total gross bonded debt amounted to \$1,426,293,679 in 1936 as compared with only \$218,875,927 in 1916, an increase of over \$1,200,000,000 in the 20 years. In addition to this bonded debt there were treasury bills outstanding on provincial accounts amounting to \$232,928,298* for 1936. Figures of bonded debt for this and previous years to 1916 are given in Table 27. The rapid rise in the bonded debt of the provinces from \$218,875,927 in 1916 is accounted for largely by the development of public ownership of utilities (such as the "Hydro" in Ontario), the extension of the highways and surfaced roads systems in all provinces (highway debentures outstanding in 1936 accounting for \$508,000,000 of the provincial debt), and the requirements for the promotion of industrial activities and public and social welfare. These demanded heavy expenditures which could not easily be met out of current revenue. The borrowings, while increasing the public debt, are in the main considered justifiable, as the public utilities are in most cases meeting from their revenues the interest on indebtedness incurred in their construction, and the provincial assets generally are sound enough to take care of capital investment for other services which are necessary to develop the country.

*Including \$600,000 which the province of New Brunswick considered a current liability.

27.—Gross Bonded Debt (Exclusive of Treasury Bills) of Provincial Governments, by Provinces, fiscal years 1916-36.

Fiscal Year.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	\$	\$	\$	\$	\$
1916.....	733,000	13,443,087	9,100,647	38,346,128	52,411,401
1917.....	733,000	13,362,707	15,809,856	39,462,996	55,301,501
1918.....	733,000	14,490,813	17,163,089	39,827,770	66,526,501
1919.....	733,000	14,614,893	18,585,760	39,706,614	81,026,501
1920.....	733,000	17,202,647	20,683,236	40,708,114	109,186,900
1921.....	858,000	20,678,267	23,573,432	51,652,113	184,693,420
1922.....	1,033,000	24,608,347	26,628,432	55,604,926	222,361,338
1923.....	1,183,000	27,134,507	28,583,932	60,605,226	255,587,757
1924.....	1,683,000	31,458,640	30,737,909	75,605,226	292,845,257
1925.....	1,833,000	36,000,928	32,345,909	81,944,926	277,045,257
1926.....	1,873,000	35,986,324	35,325,909	78,004,926	280,559,094
1927.....	1,933,000	40,708,457	36,554,409	79,212,226	293,365,994
1928.....	2,185,000	34,824,713	37,845,303	80,731,877	322,365,844
1929.....	2,109,000	46,395,847	34,780,603	80,334,792	350,563,844
1930.....	2,329,000	55,483,480	41,211,696	76,735,292	398,821,344
1931.....	2,104,000	60,325,613	45,858,996	84,235,292	455,375,344
1932.....	3,504,000	61,740,747	58,739,663	91,987,692	499,988,011
1933.....	3,754,000	66,439,880	61,935,163	110,237,892	522,687,845
1934.....	4,554,000	73,476,013	63,570,920	126,518,007	600,454,102
1935.....	5,754,000	85,866,647	67,562,920	149,748,007	594,088,188
1936.....	6,029,000	86,974,113	74,049,920	164,747,607	602,027,288

Fiscal Year.	Manitoba.	Saskat- chewan.	Alberta.	British Columbia.	Total.
	\$	\$	\$	\$	\$
1916.....	30,396,274	24,292,044	29,000,200	21,153,146	218,875,927
1917.....	31,196,870	25,439,187	30,595,200	23,153,146	235,054,463
1918.....	33,890,870	28,019,387	31,500,200	23,071,936	255,223,566
1919.....	36,897,870	29,963,410	34,635,200	27,571,936	283,735,184
1920.....	49,700,870	35,237,170	41,989,900	34,071,936	349,513,773
1921.....	61,929,870	41,785,436	59,010,257	46,511,436	490,692,231
1922.....	66,331,121	49,685,476	67,373,279	61,851,436	575,477,355
1923.....	67,914,095	52,807,876	78,522,279	65,851,436	638,190,108
1924.....	69,637,095	52,492,956	78,594,760	68,851,436	701,906,279
1925.....	66,658,595	50,493,376	81,459,407	76,443,736	704,225,134
1926.....	64,433,595	54,114,176 ¹	86,894,666	71,485,736	708,677,426
1927.....	67,293,828	56,944,576	90,890,458	75,485,736	742,388,684
1928.....	69,822,828	58,309,256	90,899,816	72,275,736	769,260,373
1929.....	71,465,161	58,275,776	96,532,443	77,482,736	817,940,202
1930.....	76,641,161	73,667,316	106,888,380	87,365,236	919,142,905
1931.....	81,381,906	85,141,205	106,866,573	95,358,236	1,016,647,165
1932.....	89,630,906	101,831,236	128,970,593	111,932,236	1,148,323,084
1933.....	90,938,906	109,209,642	133,837,260	125,332,736	1,224,372,824
1934.....	90,024,906	112,868,207	129,055,260	129,163,236	1,329,684,651
1935.....	92,136,606	121,109,740	129,744,260	127,311,236	1,373,321,604
1936.....	95,480,881	124,446,374	128,140,260	144,398,236	1,426,293,679

¹ Liabilities statement is for Apr. 30; this amount includes \$500,000 due May 1.

Total Provincial Public Debt.—Table 28 gives a classified analysis of the public debt of Provincial Governments at the close of their fiscal years in 1935 and 1936.

25.—Debt of Provincial Governments at the ends of their respective fiscal years in 1935 and 1936, showing Bonded Debt with offsetting Sinking Funds, Treasury Bills, Other Direct Liabilities, Available Assets offsetting Direct Liabilities, and Indirect Liabilities.

NOTE.—For dates on which the fiscal years of the provinces end, see text on p. 869.

Year and Province.	Direct Liabilities.										Total Indirect Liabilities.
	Funded Debt.					Direct Liabilities.					
	Bonded Debt.		Net Bonded or Debenture Debt.	Treasury Bills.	Net Funded Debt.	Other Direct Liabilities.	Total Direct Liabilities (less sinking funds).	Assets Realizable (deductible).	Total Net Direct Liabilities.		
	Total Gross Bonded or Debenture Debt.	Sinking Funds (deductible).									
1935.											
Prince Edward Island.....	5,754,000	1,114,033	4,639,967	Nil	4,639,967	1,520,682	6,160,649	1,049,890	5,110,759	Nil	
Nova Scotia.....	85,866,647	5,767,759	80,098,888	Nil	80,098,888	6,288,841	86,387,729	29,585,170	56,802,559	1,156,937	
New Brunswick.....	67,562,920	8,044,866	59,518,054	300,000 ²	59,818,054	4,306,316	64,124,370	11,564,562	52,559,808	1,792,713	
Quebec.....	149,748,007	17,605,505	132,142,502	14,000,000	146,142,502	44,988,034	191,130,536	50,539,877	140,590,659	10,937,131	
Ontario.....	594,088,188	6,896,845	587,191,343	49,900,000	637,091,343	37,294,574	674,385,917	295,971,410 ³	378,414,507	99,438,793	
Manitoba.....	92,136,606	8,593,086	83,543,520	30,398,577	113,942,127	13,235,966	127,178,093	81,709,543	45,468,550	7,784,263	
Saskatchewan.....	121,109,740	8,449,761	112,659,979	53,604,646	166,264,625	19,878,941	186,143,566	111,044,509	75,099,057	32,779,710	
Alberta.....	129,744,260	9,025,223	119,819,037	16,303,760	136,122,787	20,408,214	156,531,001	49,729,293	106,801,708	9,036,054	
British Columbia.....	127,311,236	29,519,751	97,791,485	20,825,141	118,616,626	10,795,149	129,411,775	15,573,565	113,838,210	68,369,235	
Totals, 1935.....	1,373,321,604	95,916,799	1,277,404,805	185,332,114 ⁴	1,462,736,919	158,716,717	1,621,453,636	646,767,819	974,685,817	231,294,836	
1936.											
Prince Edward Island.....	6,029,000	1,315,832	4,713,168	Nil	4,713,168	1,676,459	6,389,627	1,063,345	5,326,282	Nil	
Nova Scotia.....	86,974,113	5,822,665	81,151,448	Nil	81,151,448	7,927,050	89,078,498	25,219,009	63,859,489	591,687	
New Brunswick.....	74,049,920	8,816,471	65,233,449	600,000 ²	65,833,449	3,634,304	69,467,753	12,701,980	56,765,773	1,760,497	
Quebec.....	164,747,607	21,112,125	143,635,482	26,575,000	170,210,482	47,188,002	217,398,484	49,268,335	168,130,149	10,239,301	
Ontario.....	602,027,288	7,914,333	594,112,955	50,000,000	644,112,955	45,445,559	689,558,514	283,519,691 ³	406,038,823	113,968,417	
Manitoba.....	95,480,581	9,350,881	86,130,000	28,623,826	114,753,826	12,437,419	127,191,245	78,611,384	48,579,861	7,436,969	
Saskatchewan.....	124,446,374	9,585,191	114,861,183	65,189,135	180,050,318	21,464,344	204,514,662	121,280,092	83,234,570	33,691,987	
Alberta.....	128,140,260	117,514,281	117,514,281	25,426,760	142,941,041	21,358,709	164,299,740	50,750,414	113,549,326	8,554,846	
British Columbia.....	144,398,236	31,058,968	113,339,278	33,513,587	146,852,865	18,968,319	165,821,184	27,198,255	138,622,929	48,315,998	
Totals, 1936.....	1,426,293,679	105,602,435	1,320,691,244	232,928,298 ⁴	1,553,619,542	180,100,165	1,733,719,707	649,612,505	1,084,107,202	224,549,202	

¹ In addition to the available assets shown most of the provinces had partially secured loans and advances in connection with unemployment relief, while Alberta had partially secured loans and advances, and sale of contracts for School Lands Fund amounting to over \$11,000,000 for 1935 and \$12,000,000 for 1936; British Columbia had partially secured projects, loans and advances amounting to over \$40,000,000 for 1935 and \$60,000,000 for 1936. ² New Brunswick considers this a current liability. ³ Ontario does not consider Dominion Debt Account, Common School Fund, Quebec Turnpike and Plant, Live Stock and Equipment, available assets. ⁴ Including Treasury Bills regarded as current debt by New Brunswick.

Interest Payments and Receipts of the Provinces.—The current burden of a debt in the case of a continuing organization is represented by interest payments, which may be offset in whole or in part by interest received on loans either to provincially-owned public utilities or to corporations or individual citizens. In a country where provincial public policy varies widely with regard to public ownership, it appears desirable to include a statement showing, for each province, the gross interest payments, the interest receipts and the net interest payments. This information is given below for the provincial fiscal years ended in 1936.

Province.	Gross Interest Paid.	Interest Received.	Net Interest Paid.	Net Interest Paid per Capita. ¹
	\$	\$	\$	\$
Prince Edward Island.....	268,367	Nil	268,367	2.92
Nova Scotia.....	3,563,430	934,959	2,628,471	4.91
New Brunswick.....	3,085,198	124,224	2,960,974	6.81
Quebec.....	6,087,053	1,041,790	5,045,263	1.63
Ontario.....	30,260,845	11,372,166	18,888,679	5.12
Manitoba.....	5,925,940	1,965,953	3,959,987	5.57
Saskatchewan.....	6,571,594	2,544,104	4,027,490	4.33
Alberta.....	6,566,932	944,785	5,622,147	7.28
British Columbia.....	8,279,605	425,620	7,853,985	10.47

¹ Estimates of population on which these figures are based are given on p. 155.

Section 3.—Municipal Public Finance.*

The existence of local self-governing units has always been characteristic of democratic societies, and nowhere more so than in Canada. The struggle for responsible government was naturally accompanied by an agitation for local self-government in the cities and towns of Canada and, after responsible government had been conceded, a complete system of municipalities was established throughout the old Province of Canada by the Municipal Act of 1849.† Under the division of powers made by the British North America Act between the Dominion and the Provincial Governments, legislation regarding municipal government, being a local matter, was naturally assigned to the provinces, which differ considerably with regard to their types of municipal organization. Thus, in Prince Edward Island the only incorporated municipalities are the city of Charlottetown and seven incorporated towns. In British Columbia seven of the 33 cities have fewer than 1,000 people, while there are no towns at all and only 17 villages; again, in the same province the rural districts are mainly administered from the provincial capital, there being only 28 rural municipalities. Finally, in Saskatchewan and Alberta there exist local improvement districts, areas which have not as yet been organized

*Revised by Col. J. R. Munro, Chief of the Finance Branch of the Dominion Bureau of Statistics. This Branch issues statements on "Financial Statistics of Urban Municipalities of 10,000 Population and Over", on "Bonded Indebtedness of Municipalities" and on "Assessment Valuations of Municipalities". For a list of publications see Chapter XXIX, Section 1, under "Finance".

†For a brief outline of the rise of the municipal system of Ontario, see 1922-23 Year Book, p. 108.

into rural municipalities, where the taxes are levied, collected, and expended by the Provincial Governments. Such districts, however, may be regarded as on the way to becoming self-governing rural municipalities. Their statistics are therefore included in Table 29 which gives statistics of the numbers and types of municipalities in 1935.

29.—Numbers of Municipalities, by Provinces and Classes, 1935.

Province.	Cities.	Towns.	Villages.	Counties.	Other Rural Municipalities.	Local Improvement Districts.	Suburban Municipalities.	Total.
P.E. Island.....	1	7	Nil	Nil	Nil	Nil	Nil	8
Nova Scotia.....	2	43	Nil	¹	24	Nil	Nil	69
New Brunswick...	3	20	2	15	Nil	Nil	Nil	40
Quebec.....	25	102	304	75	1,026	Nil	Nil	1,532
Ontario.....	27	145	156	38 ²	571 ³	Nil	Nil	937
Manitoba.....	4	31 ⁴	22	Nil	112	Nil	5	174
Saskatchewan.....	8	80	385	Nil	302	85	Nil	860
Alberta.....	7	53	146	Nil	162	280	Nil	648
British Columbia.	33	Nil	17	Nil	28	Nil	Nil	78
Totals.....	110	481	1,032	128	2,225	365	5	4,346

¹ Nova Scotia has 18 counties, some of which are 'municipalities', while others are divided into 'municipalities'.
² There are 43 counties in all, geographically, but a number are united for municipal purposes.
³ Officially known as 'townships'.
⁴ Includes Flinflon Municipal District.

Municipal Revenue from Taxation.—As a result of accumulated borrowings to meet conditions peculiar to the depression, the relentless advance of interest charges against realizable taxation has brought about a condition in many municipalities where expenditures are out of all proportion to receipts, in spite of the fact that the trend of interest rates has been definitely downwards. It is natural under such conditions that the general subject of taxation should receive the increasing attention of the public and, of all forms of taxation, the imposition of municipal taxes—where the tax is applied broadly to assessed valuations placed on homes and other real property and on incomes and business—hits the ratepayer's pocket most directly.

In view of the wide public interest in municipal taxation, the Dominion Bureau of Statistics published a bulletin giving as complete a picture as is possible of tax levies and taxation receipts of municipalities, classified into cities, towns and rural municipalities, by provinces, for the years 1913-35.* The following summary table, taken therefrom, gives figures of tax receipts for these years so far as they are available. Unfortunately, there are certain inconsistencies and omissions, as between provinces, which the footnotes to the table attempt to explain.

*See the bulletin "Municipal Tax Levies and Receipts, by Provinces", obtainable from the Dominion Statistician.

30.—Tax Receipts of Municipalities in Canada, by Provinces, 1913-35.

Year.	P.E.I. ¹	N.S.	N.B. ²	Que.	Ont.	Man.	Sask.	Alta.	B.C. ³
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1913..				4					
1914..									
1915..				33,288,115					4
1916..				32,131,489					
1917..				33,222,593					
1918..		3,462,587		36,628,407					9,382,099
1919..		3,443,681		47,001,911					10,630,355
1920..		4,099,780		53,929,349					14,096,799
1921..		4,727,730		60,400,650					15,519,092
1922..		5,229,302		57,311,990					14,664,292 ³
1923..		6,367,966		53,857,190					
1924..		6,184,398		64,236,251	94,526,271		22,278,621		14,506,982
1925..		6,012,030		65,654,871	94,559,210		27,245,639	10,706,183	13,856,416
1926..		6,397,612		67,779,258	96,703,171		26,300,069	9,694,632	14,748,216
1927..		6,576,609		71,044,091	103,426,618		26,241,928	12,433,696	14,858,435
1928..		6,801,365		62,619,679	107,449,970		27,369,597	10,572,853	15,208,181
1929..		6,813,918		69,450,228	116,693,006		26,612,226	9,583,254	16,153,676
1930..		6,642,094		73,337,620	120,627,896		20,779,829	11,005,241	17,345,523
1931..	168,646	6,605,580	2,598,910	73,761,481	122,316,767	6,998,963 ⁴	18,392,914	10,424,676	17,989,046
1932..	145,830	6,613,675	2,441,063	79,612,584	121,284,311	17,290,889 ⁵	17,616,414	10,255,692	18,260,430
1933..	156,135	6,440,471	2,295,247	79,471,242	116,920,000	17,104,553	15,822,648	12,032,471	17,089,972
1934..	164,158	7,108,035	2,207,230	59,729,973 ⁶	117,892,884	18,187,714	16,624,753	11,661,595	17,521,554
1935..	168,262	7,073,053	2,353,811	59,253,714 ⁶	122,108,912	16,622,464	16,769,993	12,218,328	18,002,475
								10,900,409	17,185,917

¹ Statistics are for Charlottetown only.² Cities of Saint John, Moncton and Fredericton only, except for 1934 and 1935 figures which are for Saint John and Moncton only.³ B.C. has no municipal organization of towns and provision was first made for villages in 1922. Statistics of tax receipts for cities and rural districts are shown from 1917-21, and those for cities, villages and rural districts from 1922.⁴ Comparable figures not available.⁵ The figure shown is for all municipalities except cities, whereas cities are included for other years. A comparable figure is not obtainable but receipts for Winnipeg were \$10,874,891, and the total tax imposition for the cities of Brandon, Portage la Prairie, and St. Boniface was \$1,652,241 in 1931.⁶ Revenue for municipalities and receipts for schools. See also footnote 2, to Table 33, p. 884.

Municipal Assessments.—The chief basis of municipal tax revenue is the real estate within the limits of the municipalities; though, as indicated above, in certain provinces personal property, income, and business carried on are also taxed. General taxes are normally assessed at the rate of so many mills on the dollar of the assessed valuations. In the Prairie Provinces, the values of improvements made to real property are often rated at a very low figure, *e.g.*, in Saskatchewan, where the taxable valuations of buildings are about 12 p.c. of the taxable valuations of lands, and in Alberta, where they are about 30 p.c. of the taxable valuations of lands, as shown in Table 31.

There are various reasons for fluctuations in assessment valuations, due to differences in laws and varying practices with regard to assessment as among provinces, as among classes of municipalities, and as among municipalities of the same class from year to year. Such matters are more fully dealt with in the special report of the Dominion Bureau of Statistics on "Assessment Valuations by Provinces", obtainable from the Dominion Statistician.

Lands in the West, valuations for which in earlier years were somewhat inflated, have of late been assessed on a sounder basis, and in some provinces the Equalization Boards have placed a more equitable valuation on lands as among the various rural municipalities.

31.—Summary Statement Showing Total Assessment Valuations of Municipalities, by Provinces, 1931-35.

NOTE.—Corresponding figures for 1927 and 1928 will be found at p. 824 of the 1930 Year Book and for 1929 and 1930 at p. 874 of the 1936 Year Book. Data for earlier years will be found in previous editions.

Province.	Taxable Real Property.		Personal Property.	Income.	Total Taxable Valuations. ¹	Exempted Property.
	Land.	Total, Land and Buildings.				
	\$	\$	\$	\$	\$	\$
P.E.I.....1931		32,595,794	6,336,017		39,302,440	1,828,000
1932		33,679,705	5,350,022		39,258,331	1,826,000
1933	2	33,731,795	6,307,809	3	40,220,965	5,183,790
1934		33,987,896	6,217,767		40,385,822	5,187,040
1935		34,065,474	6,322,012		40,385,851	8,225,030
N.S.....1931		140,107,075 ⁴	24,383,477 ⁴	1,522,600 ⁴	177,215,514 ⁴	48,119,429
1932		141,006,134 ⁴	23,887,409 ⁴	2,091,162 ⁴	178,563,967 ⁴	47,524,274
1933	2	139,323,274 ⁴	22,616,603 ⁴	1,198,436 ⁴	174,180,858 ⁴	45,513,267
1934		137,808,458	22,071,512 ⁴	1,081,182 ⁴	171,701,982	44,961,175
1935		137,172,626	22,298,294 ⁴	1,133,393 ⁴	171,345,143	47,309,476
N.B.....1931		130,053,404	23,511,406		153,564,810	
1932		127,865,063	20,592,746		148,457,809	
1933	2	129,634,462	19,580,954	2	149,215,416	2
1934		126,366,539	19,333,049		145,699,588	
1935		123,570,899	18,227,865		141,798,764	
Que.....1931		2,210,942,541			2,223,478,680	705,797,801 ⁶
1932		2,226,143,786			2,269,148,711	726,626,886 ⁶
1933	2	2,192,446,982	3	2	2,240,825,176	741,701,310 ⁶
1934		2,184,368,606			2,233,093,702	743,230,611 ⁶
1935		2,173,591,643			2,224,039,302	734,498,153 ⁶
Ont.....1931	1,327,606,008	2,811,763,235		131,335,748	3,183,152,415 ⁷	536,535,708
1932	1,322,677,599	2,839,752,534		123,027,653	3,207,396,156 ⁷	559,613,040
1933	1,298,794,571	2,817,352,141	3	105,838,712	3,163,733,491 ⁷	578,130,065
1934	1,266,175,295	2,702,400,638		86,035,072	3,023,011,441 ⁷	587,889,203
1935	2	2,685,249,332		71,500,340	3,000,835,872 ⁷	380,845,652
Man.....1931		539,012,367	7,656,667		557,103,129	156,793,923
1932		536,413,841	5,989,568		552,296,364	158,588,317
1933	2	502,767,941	5,769,755	3	517,628,197	162,430,924
1934		495,428,343	5,595,233		509,753,890	162,235,639
1935		471,645,195	5,479,320		487,829,469	159,039,314
Sask.....1931	972,490,470	1,089,729,394			1,134,460,775	
1932	968,674,804	1,088,167,082			1,129,447,552	
1933	959,838,291	1,076,520,081	3	3	1,115,773,324	2
1934	950,175,177	1,067,714,102			1,106,016,437	
1935	941,489,766	1,058,009,449			1,096,061,102	
Alta.....1931	456,099,459 ⁸	579,960,105 ⁸			595,745,117 ⁸	
1932	446,925,085 ⁸	571,119,947 ⁸			589,424,200 ⁸	
1933	445,610,003 ⁸	567,605,428 ⁸	3	3	586,965,175 ⁸	2
1934	437,678,242 ⁸	560,408,966 ⁸			577,407,878 ⁸	
1935	383,233,937 ⁸	501,630,807 ⁸			518,180,058 ⁸	
B.C.....1931	303,667,022	688,096,083			688,096,083	149,274,900
1932	293,986,938	677,355,920			677,355,920	151,520,124
1933	277,291,181	640,461,800	3	3	640,461,800	145,988,409
1934	268,996,902	625,762,235			625,762,235	146,434,234
1935	243,225,090	583,756,323			583,756,323	146,685,827
Totals....1931		8,222,259,998 ¹⁰			8,752,118,963 ¹⁰	
1932		8,241,504,012 ¹⁰			8,791,349,010 ¹⁰	
1933	9	8,099,843,904 ¹⁰	9	9	8,629,004,402 ¹⁰	9
1934		7,934,245,783 ¹⁰			8,432,832,975 ¹⁰	
1935		7,768,691,748 ¹⁰			8,264,234,884 ¹⁰	

¹ Includes certain other taxable valuations.

² Not available.

³ No assessment in this province.

⁴ Includes exemptions for municipality of Cumberland, Nova Scotia. ⁵ In Nova Scotia personal property and income assessments for cities are for Sydney only.

⁶ These amounts include property temporarily exempted. ⁷ In addition, assessments for schools only in Ontario were: townships \$4,486,690, towns and villages \$20,499,195, and cities \$93,816,472 in 1931; townships \$4,976,492, towns and villages \$18,249,670, and cities \$86,803,023 in 1932; townships \$3,495,026, towns and villages \$12,884,022, and cities \$86,638,946 in 1933; townships \$2,636,133, villages \$1,167,415, towns \$16,656,397, and cities \$86,657,415 in 1934; and cities \$84,204,218 in 1935. Assessments for school purposes only for other municipalities were not shown in the Ontario report for 1935.

⁸ Local Improvement Districts not included for 1931 and later years. ⁹ Complete totals not available. ¹⁰ In interpreting these totals, footnotes on the constituent items should be noted.

Bonded Indebtedness.—Like other Canadian governing bodies the municipalities of the greater part of Canada borrowed rather freely during the boom period of 1900-12, and again during the nineteen-twenties. The bonded indebtedness of

Ontario municipalities rose from \$153,568,409 in 1913 to \$461,653,182 in 1935, while that of Quebec municipalities increased from \$173,720,141 in 1915 to \$574,883,119 in 1935, and a proportionate increase took place in other provinces. The recent growth in the bonded indebtedness of all classes of municipalities is shown by provinces in Table 32. The figures show that there was an increase in 1935 over 1934 in the provinces of Prince Edward Island, Nova Scotia, New Brunswick, Quebec, Manitoba and British Columbia; the others showed a decrease. In Saskatchewan, net debenture debt is shown for all municipalities in 1919, while from 1920 the statistics represent gross debenture debt. In Alberta in the earlier years, figures represent principally net debenture debt but from 1929 gross debenture debt is shown. All other provinces give gross total debenture debt throughout.

32.—Total Bonded Indebtedness of All Classes of Municipalities, by Provinces, 1919-35.

NOTE.—Figures are for gross debenture debt unless otherwise indicated.

Year.	Prince Edward Island. ¹	Nova Scotia.	New Brunswick. ²	Quebec.	Ontario.
	\$	\$	\$	\$	\$
1919.....	970,100	17,863,881	11,188,467	199,705,568	243,226,877
1920.....	1,086,500	19,192,462	10,841,466	224,269,714	269,727,271
1921.....	1,202,200	22,451,743	7,578,567	230,955,538	317,613,283
1922.....	1,254,900	23,541,759	10,025,633	246,920,376	349,276,606
1923.....	1,290,800	24,248,732	7,974,362	260,907,356	376,512,002
1924.....	1,143,550	25,348,664	17,350,225	276,834,787	430,010,501
1925.....	1,163,080	25,722,635	10,680,863	281,213,213	405,178,853
1926.....	1,247,545	26,281,152	17,091,550	296,746,090	413,474,813
1927.....	1,452,425	28,381,616	15,707,699	313,416,960	434,464,056
1928.....	1,515,125	29,049,412	19,584,335	335,784,811	435,912,807
1929.....	1,598,624	29,029,119	21,343,890	352,291,456	451,936,592
1930.....	1,863,211	30,182,264	20,942,988	384,763,515	485,280,182
1931.....	1,959,672	31,386,025	22,165,501	427,815,926	499,002,074
1932.....	2,129,350	31,606,140	24,752,873	463,613,696	504,755,977
1933.....	2,147,650	32,772,717	24,667,909	479,608,472	494,433,956
1934.....	2,348,275	33,318,115	26,495,037	565,218,160	483,952,700
1935.....	2,479,550	33,866,913	27,538,898	574,883,119	461,653,182

Year.	Manitoba.	Saskat- chewan. ³	Alberta.	British Columbia.	Total. ⁴
	\$	\$	\$	\$	\$
1919.....	55,562,788	39,585,388 ⁵	66,870,464 ⁶	94,741,615	729,715,148
1920.....	57,820,588	40,611,271	57,205,275 ⁶	96,107,911	776,862,458
1921.....	65,463,239	41,180,255	53,429,558 ⁶	97,495,984	837,370,367
1922.....	68,811,040	59,719,165	60,832,650 ⁶	98,761,630	919,143,759
1923.....	73,908,963	59,011,174	70,999,611 ⁶	96,273,987	971,127,037
1924.....	73,944,105	57,763,699	65,414,317 ⁶	96,106,151	1,043,915,999
1925.....	79,211,867	55,835,505	57,908,593 ⁶	99,055,201	1,015,949,780
1926.....	80,716,272	54,844,759	56,950,712 ⁶	102,853,223	1,050,206,121
1927.....	83,017,302	54,361,158	62,414,660 ⁶	107,376,118	1,100,591,994
1928.....	85,651,906	53,092,330	63,428,853 ⁶	110,124,819	1,134,144,398
1929.....	85,901,404	54,913,100	78,473,392	118,483,618	1,193,971,195
1930.....	84,879,707	59,000,183	78,645,803	125,832,088	1,271,389,941
1931.....	91,615,195	59,146,592	78,679,571	129,913,890	1,341,684,446
1932.....	92,471,256	59,238,281	76,892,413	129,332,791	1,384,792,777
1933.....	96,076,856 ⁶	57,288,400	69,455,181	128,094,159	1,384,545,300
1934.....	90,767,215	55,692,110	67,886,011	127,172,942	1,452,850,565
1935.....	95,557,149 ⁷	55,519,672	67,251,233	127,370,560	1,446,120,276

¹ Municipalities included cannot be enumerated for the years 1919-23; figures represent Charlottetown and Kensington 1924-33; Montague for 1925-33; Summerside, Souris, Georgetown, and Alberton 1926-33; and Borden 1932-33. For later years the figures include all eight incorporated municipalities of the province.

² Municipalities included cannot be enumerated for the years 1919-23; figures are for 3 cities, 18 towns, 2 villages, and 15 counties in 1924; 2 cities, 13 towns, 2 villages, and 15 counties in 1925; 3 cities, 18 towns, 1 village, and 15 counties in 1926; 3 cities, 23 towns, 4 villages, and 15 counties in 1927, 1928 and 1929; 3 cities, 19 towns, 2 villages, and 15 counties in 1930; and 3 cities, 20 towns, 2 villages, and 15 counties from 1931.

³ Statistics of school debt for villages and rural municipalities not included.

⁴ Footnotes on constituent items should be noted in interpreting these totals.

⁵ Includes deferred liabilities, not separable.

⁶ Figures for this year

⁷ Includes schools.

33.—Principal Financial and Other Statistics of Canadian Cities and Towns with Populations of 10,000 or Over, 1935.

Province and City.	Area.	Population as furnished by Municipality.	Total Assessed Value of Taxable Property.	Grand Total Receipts.	Grand Total Expenditures.	Total Assets.	Total Liabilities.
	acres.	No.	\$	\$	\$	\$	\$
Prince Edward Island—							
Charlottetown.....	810	13,883	9,146,488	216,906	264,740	3,102,252	2,385,877
Nova Scotia—							
Halifax.....	4,403	59,275	58,560,210	3,380,309	3,380,309	21,961,008	21,961,008
Sydney.....	3,730	25,000	12,013,260	1,865,323	1,865,323	5,784,681	5,784,681
Glace Bay.....	6,202	20,706	5,120,000	687,367	685,867	2,580,057	1,798,105
New Brunswick—							
Saint John.....	13,440	50,000	41,123,950	2,921,512	2,699,037	15,748,227	10,119,046
Moncton.....	2,093	21,639	22,109,005	974,868	967,663	7,848,761	7,318,113
Quebec—²							
Montreal.....	32,254	850,000	977,401,255	37,267,775	43,206,847	418,169,929	398,720,736
Quebec.....	5,754	145,000	128,411,719	5,759,046	5,968,627	52,446,036	48,545,987
Verdun.....	1,426	60,871	43,987,050	2,044,296	2,051,567	17,403,096	16,126,486
Three Rivers.....	2,560	40,185	29,345,431	1,997,466	2,022,486	15,745,529	17,089,214
Hull.....	4,000	30,058	20,890,724	1,290,395	1,401,478	7,551,106	7,166,777
Sherbrooke.....	3,104	29,512	27,524,485	1,432,221	1,433,750	13,503,036	8,806,874
Outremont.....	975	29,300	43,554,576	1,045,165	1,219,049	9,828,157	9,073,158
Westmount.....	976	26,000	67,397,492	1,683,482	1,882,098	15,472,576	14,065,364
Lachine.....	2,996	19,037	20,683,969	783,889	833,543	9,262,739	8,158,404
Shawinigan Falls.....	1,610	16,485	25,771,619	703,385	668,143	7,382,608	6,470,663
St. Hyacinthe.....	1,170	15,307	13,058,964	412,798	444,317	3,250,561	1,773,776
Valleyfield.....	600	13,288	6,667,405	345,879	366,683	1,942,889	1,684,415
Chicoutimi.....	1,570	13,021	16,682,196	293,198	353,100	3,403,352	2,464,789
St. Jean.....	1,331	12,400	11,206,325	320,045	306,868	2,963,447	2,237,863
Joliette.....	1,288	11,976	5,649,145	259,133	255,128	2,511,018	1,581,247
Lévis.....	2,222	11,768	6,079,901	276,422	273,796	2,238,870	1,515,522
Granby.....	960	11,767	6,665,890	223,142	217,219	1,767,006	1,207,747
Jonquière.....	1,800	11,000	4,387,530	269,568	284,143	2,773,618	2,617,942
Sorel.....	2,000	10,800	5,404,020	240,061	270,985	1,744,487	1,748,821
Thetford Mines.....	2,080	10,705	6,113,900	205,074	198,692	1,516,974	549,831
Ontario—³							
Toronto.....	12,889	638,271	1,015,409,940				
Hamilton.....	9,273	154,020	168,737,850				
Ottawa.....	2,962	140,316	156,480,054				
Windsor.....	4,135	98,745	105,609,373				
London.....	7,231	75,484	84,179,187				
Kitchener.....	2,953	31,933	26,254,770				
Brantford.....	1,709	31,212	28,149,325				
St. Catharines.....	1,860	26,571	24,909,324				
Fort William.....	9,865	24,371	30,712,304				
Kingston.....	1,835	24,173	19,363,688				
Oshawa.....	2,589	24,097	16,213,439				
Sault Ste. Marie.....	4,900	23,387	19,496,177				
Peterborough.....	1,898	22,973	27,444,975				
Guelph.....	2,476	21,173	14,331,005				
Port Arthur.....	6,514	20,352	26,243,360				
Sudbury.....	2,710	20,079	12,734,079	3	3	3	3
Niagara Falls.....	1,278	18,527	18,434,030				
Sarnia.....	1,375	18,064	17,994,928				
Stratford.....	2,123	17,643	14,752,560				
Timmins.....	738	17,535	6,907,966				
North Bay.....	2,100	16,594	9,663,104				
St. Thomas.....	1,898	16,156	15,286,582				
Chatham.....	1,005	15,957	14,566,094				
Belleville.....	1,800	14,411	10,596,880				
Galt.....	1,406	13,958	11,153,355				
Owen Sound.....	2,909	13,139	8,684,087				
Cornwall.....	700	12,507	9,495,270				
Woodstock.....	1,525	10,936	7,577,867				
Welland.....	768	10,402	11,046,670				
Pembroke.....	1,323	10,173	5,387,288				

¹ Census of 1931.² Statistics of receipts, expenditures, assets, and liabilities are not strictly comparable with years previous to 1934 owing to modifications of provincial report in 1934.³ Owing to a revision of the system of reporting municipal statistics, incomplete returns only are available for receipts, expenditures, assets, and liabilities.

33.—Principal Financial and Other Statistics of Canadian Cities and Towns with Populations of 10,000 or Over, 1935—concluded.

Province and City.	Area.	Population as furnished by Municipality.	Total Assessed Value of Taxable Property.	Grand Total Receipts.	Grand Total Expenditures.	Total Assets.	Total Liabilities.
	acres.	No.	\$	\$	\$	\$	\$
Manitoba—							
Winnipeg.....	15,287	224,998	209,745,251	1	1	46,102,787 ²	78,603,140
Brandon.....	5,427	17,082 ³	11,594,327	1	1	3,868,232 ²	4,739,043
St. Boniface.....	11,642	16,305 ²	9,171,595	1	1	6,085,283 ²	8,087,596
Saskatchewan—							
Regina.....	8,936	53,750	42,554,530	6,253,028	5,813,887	28,010,739	18,673,171
Saskatoon.....	8,000	42,250	34,113,870	4,951,402	4,544,337	20,818,536	17,731,285
Moose Jaw.....	9,410	20,000	18,164,840	1,891,942	1,607,761	12,563,954	7,099,367
Prince Albert.....	9,713	10,500	6,721,413	576,675	587,413	4,965,527	3,764,184
Alberta—							
Calgary.....	25,920	85,000	64,252,684	5,305,971	5,387,721	1	25,751,034
Edmonton.....	27,200	81,621	54,613,530	7,847,268	8,077,405	1	38,469,502
Lethbridge.....	6,944	14,000	10,113,155	813,537	738,883	1	4,257,497
Medicine Hat.....	10,880	10,300	7,291,095	703,040	650,047	1	2,959,984
British Columbia—							
Vancouver.....	27,965	246,593	313,460,102	13,576,090	14,228,270	1	85,087,867
Victoria.....	4,637	39,082	48,475,656	2,642,552	3,329,197	1	17,081,430
New Westminster..	3,481	17,524	19,313,273	1,155,604	1,297,473	1	7,074,965

¹ Not available.² Real property and public utility assets not included.³ Census of 1931.

Section 4.—National Wealth and Income.

Subsection 1.—National Wealth.

The economic concept of national wealth is concrete and purely material since economics is not able to take cognizance of the immense field of intangible wealth created by churches, schools and other institutions, nor of such things as climate, location, health, etc., which promote individual and national welfare and are often referred to as wealth, but in a different sense from that meant here. Our national wealth, as here understood, is the sum total of our physical assets. It includes all farms, factories, equipment, merchandise in stock, and the thousand and one material things which Canada as a nation possesses. It does not include such things as stocks, bonds, mortgages, etc., which an individual regards as wealth but which, in reality, are mere evidences of ownership. From the point of view of the nation as a whole, all such claims and counter claims must be ruled out. There is, too, a large field of intangible wealth such as that represented by organizations for doing business of all kinds, the reputation of business firms, managerial experience, etc., of which no account can be taken in a statistical determination of wealth. Further, a distinction must be made between 'present' and 'potential' wealth. Canada has an immense potential wealth in forests, mines, etc., the present value of which it is impossible to estimate.

Notwithstanding the enormous statistical and economic difficulties inherent in any evaluation of the national wealth, the justification for such attempts lies in the importance of such information for an analysis of a nation's social and economic position. A general idea of the size and composition of the national wealth is essential for the intelligent consideration of many problems, both national and international, although, in view of the numerous elements of uncertainty in a calculation of this nature, the statistics must be regarded as indicative rather than strictly accurate; when carefully prepared they hold a very important place in a national statistical system.

There are several methods of computing national wealth, *i.e.*, the aggregate value of the public and private property within the nation apart from undeveloped

natural resources. Perhaps the most familiar of these methods is that of working back to capital values through income tax returns, but this can be applied only in countries where small as well as large incomes are assessed for income tax. A second method is that of estimation from probate returns, the value of the estates of deceased persons being regarded as representative. A third is that of a complete census, based upon a canvass of the individual. A fourth method, namely, the so-called 'inventory' method, is often employed.* The estimate of Canada's wealth herein presented is based on the inventory principle, *i.e.*, an attempt is made to secure for the nation an approximation of the businessman's inventory of his possessions. This method consists in totalling the amounts known from various sources to be invested in agriculture, manufacturing, dwellings, etc. It does not include the value of undeveloped natural resources but only natural wealth which has been appropriated. For instance, it includes the value of the machinery and other capital equipment used in coal mining but not the unmined coal; the boats used in fishing but not the fish in the sea; the power plants and equipment used in developing water power but not the waterfalls themselves. In the case of forest wealth partial exception is made by the inclusion of accessible raw materials. When making comparison between the different provinces it should be remembered that this method tends to understate the wealth of any section of the country which is rich in mines, fisheries or water power.

Whatever method is used, difficulty arises when we try to reduce all the things which go to make up wealth (things which once created are not themselves subject to violent change) to a common denominator. Estimates of national wealth must always be expressed in terms of the national currency. Yet the purchasing power of the currency unit is always fluctuating and since 1929 had increased at one point (February, 1933) by more than 50 p.c. in terms of wholesale prices. Even in 1930, the average index number of wholesale prices was down by nearly 10 p.c. from 1929, while in December of that year the average index number of wholesale prices was 19 p.c. lower than in the same month of 1929.

The effect of such drastic reductions in values is first felt by the commodities which are being currently produced and, through these commodities, the dollar value of production is diminished and consequently the national income of a country where most people are producers. Ultimately, a persistent decline of this character affects the capital values of real estate, buildings, machinery, etc., and its influence is then felt in a reduction in the national wealth as stated in dollars.

The first official estimate of national wealth issued by the Dominion Bureau of Statistics was for 1921, being based on the census data of that year. The national wealth was then placed at \$22,195,000,000. Later estimates were \$25,673,000,000 for 1925 and \$27,668,000,000 for 1927. The estimates for 1921, 1925 and 1927 are not exactly comparable with those for 1929 and 1933 given below, but are sufficiently so for most purposes. The estimate for 1929 is \$31,276,000,000, and the 1933 estimate \$25,768,000,000. The former presents a picture at the peak of domestic prosperity, whereas that of 1933 reflects the writing down of values resulting from the depression. The 1933 estimate is the latest that has been published.

Wealth of Canada by Items, 1929 and 1933.—In the items showing the composition of the national wealth, as set out in Table 34, care has been taken to exclude duplication. In any consideration of the individual items it should be

*An explanation of method and of the background of early estimates of national wealth as applied to Canada will be found in the article "The Wealth of Canada and Other Nations" by R. H. Coats, Dominion Statistician, published in the *Journal of the Canadian Bankers' Association*, October, 1919.

remembered that each item covers only the portion of wealth which is stated in the description attached thereto. For instance, the item "Fisheries" includes only capital invested in primary operations. Capital invested in fish-canning and -curing establishments is included with "Manufactures", though this also might be considered as part of the wealth connected with "Fisheries". Similarly, the items for "Manufactures" do not include lands and buildings in urban centres which are shown under the heading "Urban Real Property".*

* A fuller explanation of the composition of the separate items is contained in the bulletin "Canada's National Wealth", obtainable from the Dominion Statistician.

34.—Estimate of the National Wealth of Canada, with Percentage and Per Capita Distribution of Component Items, 1929 and 1933.

NOTE.—For discussion of these items, see p. 871 of the 1933 Year Book and the bulletin referred to above.

Classification of Wealth.	Aggregate Amounts.		Percentages of Totals.		Average Amounts per Head of Population. ¹	
	1929.	1933.	1929.	1933.	1929.	1933.
	\$'000	\$'000	p.c.	p.c.	\$	\$
Farm values (land, buildings, implements, machinery, and live stock).....	6,308,353	4,760,844	20.17	18.48	629.01	445.73
Agricultural products in the possession of farmers and traders.....	1,631,124	802,946	5.22	3.11	162.64	75.17
Totals, Agricultural Wealth.....	7,939,477	5,563,790	25.39	21.59	791.65	520.90
Mines (capital employed).....	867,021	800,292	2.77	3.10	86.45	74.93
Forests (estimated value of accessible raw materials, pulpwood and capital invested in woods operations).....	2,299,903	2,090,821	7.35	8.11	229.33	195.75
Fisheries (capital invested in boats, gear, etc., in primary operations).....	33,935	25,380	0.11	0.10	3.38	2.38
Central electric stations (capital invested in lands and buildings other than office buildings and in equipment, materials, etc.)....	1,003,070	1,309,801	3.21	5.08	100.02	122.63
Manufactures (machinery and tools, and estimate for capital in rural lands and buildings, duplication excluded).....	1,421,430	949,721	4.55	3.69	141.73	88.92
Manufactures (materials on hand and stocks in process, duplication excluded).....	837,805	368,070	2.68	1.43	83.54	34.46
Construction, custom and repair (estimate of capital invested in machinery and tools and materials on hand).....	137,685	32,385	0.44	0.13	13.73	3.03
Trading establishments (estimate of the value of furniture and fixtures, equipment and materials on hand).....	1,039,584	708,043	3.32	2.75	103.66	66.29
Steam railways (investment in road and equipment).....	3,321,033	3,365,464	10.62	13.06	331.14	315.09
Electric railways (investment in road and equipment).....	240,111	223,704	0.77	0.87	23.94	20.94
Telephones (cost of property and equipment).....	291,589	330,491	0.93	1.28	29.07	30.94
Urban real property (assessed valuations and exempted property and estimate for under-valuation by assessors and for roads, sewers, etc.).....	8,251,011	6,913,530	26.38	26.83	822.72	647.27
Canals (amount expended on construction to Mar. 31, 1930).....	241,946	267,671	0.77	1.04	24.13	25.06
Harbours (approximate amount expended to Mar. 31, 1930).....	405,346	502,264	1.30	1.95	40.42	47.02
Shipping (including aircraft).....	150,827	135,506	0.48	0.53	15.04	12.69
Automobiles (estimate of the value of automobiles registered).....	690,039	392,211	2.21	1.52	68.81	36.72
Highways, etc.....	532,972	689,333	1.70	2.68	53.14	64.54
Household furnishings, clothing, etc. (value estimated from production and trade statistics).....	1,370,000	913,397	4.38	3.54	136.60	85.52
Specie, coin and other currency held by the Government, chartered banks and the general public.....	201,030	186,362	0.64	0.72	20.04	17.45
Grand Totals.....	31,275,814	25,768,236	100.00	100.00	3,118.54	2,412.53

¹ These averages are based on the estimates of population as given in Table 35, p. 888.

Aggregate and Per Capita Wealth, by Provinces, 1929 and 1933.—As regards the provincial distribution of wealth in 1933, Ontario ranked first with an estimated aggregate wealth of \$8,796,000,000 or 34.14 p.c. of the total; Quebec second with \$6,738,000,000 or 26.15 p.c.; Saskatchewan third with \$2,527,000,000 or 9.81 p.c.; and British Columbia fourth with \$2,431,000,000 or 9.43 p.c. of the whole.

While Ontario and Quebec led in absolute wealth, the western provinces came first in per capita wealth. British Columbia held first rank with a per capita wealth of \$3,414, Alberta second with \$2,721, and Saskatchewan third with \$2,711. Ontario with a per capita wealth of \$2,468 was fourth, Quebec was fifth with \$2,269, and Manitoba sixth with \$2,201. The per capita wealth for the whole Dominion was estimated at \$2,413.

Further details, including revised figures for 1929, are shown in Table 35. In 1929 the provinces held the same relative places, both as regards aggregate and per capita wealth.

35.—Provincial Distribution of the National Wealth of Canada, with Percentage and Per Capita Analyses, 1929 and 1933.

NOTE.—Figures for 1921 and 1925 are given on pp. 849-850 of the 1927-28 Year Book, and for 1927 on p. 870 of the 1931 Year Book.

Year and Province.	Estimated Wealth.	Percentage Distribu- tion of Wealth.	Estimated Population, June 1.	Percentage Distribu- tion of Population.	Wealth per Capita.
	\$	p.c.	No.	p.c.	\$
1929.					
Prince Edward Island.....	167,117,000	0.54	88,000	0.88	1,899
Nova Scotia.....	925,822,000	2.96	515,000	5.14	1,798
New Brunswick.....	855,511,000	2.74	404,000	4.03	2,118
Quebec.....	8,403,854,000	26.87	2,772,000	27.64	3,032
Ontario.....	10,655,562,000	34.07	3,334,000	33.24	3,196
Manitoba.....	1,979,141,000	6.33	677,000	6.75	2,923
Saskatchewan.....	3,088,281,000	9.87	883,000	8.80	3,497
Alberta.....	2,427,957,000	7.76	684,000	6.82	3,550
British Columbia.....	2,756,844,000	8.81	659,000	6.57	4,183
Yukon.....	15,725,000	0.05	4,000	0.04	1
Totals.....	31,275,814,000	100.00	10,029,000²	100.00²	3,119
1933.					
Prince Edward Island.....	138,699,000	0.54	89,000	0.83	1,558
Nova Scotia.....	790,290,000	3.07	522,000	4.89	1,514
New Brunswick.....	730,297,000	2.83	420,000	3.93	1,739
Quebec.....	6,738,181,000	26.15	2,970,000	27.81	2,269
Ontario.....	8,795,801,000	34.14	3,564,000	32.99	2,468
Manitoba.....	1,562,421,000	6.06	710,000	6.75	2,201
Saskatchewan.....	2,527,147,000	9.81	932,000	8.90	2,711
Alberta.....	2,035,576,000	7.90	748,000	7.09	2,721
British Columbia.....	2,430,890,000	9.43	712,000	6.67	3,414
Yukon.....	18,934,000	0.07	4,000	0.04	1
Totals.....	25,768,236,000	100.00	10,681,000²	100.00²	2,413

¹ As the statistics for Yukon are uncertain, the per capita estimate of wealth is not shown. ² Includes the population of the Northwest Territories: 9,000 in 1929 and 10,000 in 1933, 0.09 p.c. in both cases.

Analyses of Itemized Wealth, by Provinces, 1929 and 1933.—In Table 39 on pp. 882-883 of the 1936 Year Book detailed statistics of the wealth of each province by leading items were published. This information is not repeated in this edition.

Subsection 2.—National Income* and Income Tax Statistics.

Definition of National Income.—"The annual labour of every nation is the fund which originally supplies it with all the necessities and conveniences of life which it annually consumes, and which consist always either in the immediate produce of that labour, or in what is purchased with that produce from other nations."—ADAM SMITH. This is perhaps the earliest modern definition of 'national income' and is still among the best, when it is interpreted in accordance with modern knowledge regarding the balance of international payments and the necessity of keeping productive equipment in running order. It must also be remembered that while the national income consists in goods and services of the most varied kinds, its total amount can be stated only in terms of money.

Following, is a statement of the nature of national income from the standpoint of the statistical technique used in its compilation, the description also being in line with present-day economic theory.

"Year in, year out, the people of this country, assisted by the stock of goods in their possession, render a vast volume of work toward the satisfaction of their wants. Some of this work eventuates in commodities, such as coal, steel, clothing, furniture, automobiles; other takes the form of direct personal services, such as are rendered by physicians, lawyers, government officials, domestic servants, and the like. Both types of activity involve an effort on the part of an individual and an expenditure of some part of the country's stock of goods. If all commodities produced and all personal services rendered during the year are added at their market value, and from the resulting total we subtract the value of that part of the nation's stock of goods which was expended (both as raw materials and as capital equipment) in producing this total, then the remainder constitutes the net product of the national economy during the year. It is referred to as national income produced, and may be defined briefly as that part of the economy's end-product which is attributable to the efforts of the individuals who comprise a nation."†

Approaches to the Measurement of National Income.—The statistical measurement of the national income is a matter of great difficulty, and the most unremitting research into all the relevant statistics, in order to establish a representative figure, must always leave an appreciable margin of error. Indeed, it is no easy matter even for an individual to establish an accurate money figure as representing his *total* income, especially where he has to include in that total income, besides his cash income, an allowance for the rental value of his (owned) house and his durable belongings therein, together with an allowance for the money value of the commodities produced and consumed within the household (such as eggs and garden produce), and of the services, ordinarily bought and sold but rendered gratis within the family circle. Yet this is the only logical way of obtaining the total income of the family. While such income, not received directly in money, but in commodities produced and services rendered, is not, except for house and furniture rent, an important percentage of the family income in most urban families, it con-

*The subsection on national income has been revised by Sydney B. Smith, M.A., Dominion Bureau of Statistics.

†See *National Income* 1929-32 and 1929-35, U.S. Department of Commerce.

stitutes a very important part of the income of most rural families, who, to a much larger extent, consume the commodities which they themselves produce. For this reason, indeed, comparisons between the incomes of urban families and rural families are often misleading, through not allowing for the non-money income of the latter. Certainly most people never think of their non-money income as income at all, and would never consider putting the rental value of their owned homes into their income tax returns. Indeed, the income tax authorities of Canada do not expect them to do so.

Difficulties experienced in expressing the total income of an individual as a single figure are multiplied a thousand-fold in any attempt to express the total of the national income as a single figure. The individual and corporate incomes which are to be combined into this grand total *without duplication* are of such a heterogeneous character that any figure which may be given as the grand total of the national income must include some margin of error.

The computation of the national income involves research by two different avenues of approach.

(1) Statistical data on an annual basis is collected by the Bureau of Statistics for most of the groups engaged in commodity production, trade and leading branches of transportation. The gross revenue received by each of these groups is taken as the starting point. The cost of raw materials, process supplies, fuel and purchased electricity is the first deduction. It is necessary also to subtract the miscellaneous expenses including rent, insurance, taxes, etc. The collection of miscellaneous expenses by the census of industry was discontinued after 1921, but the relationships established in the first three years of the post-war period are proving valuable as a basis of estimate. A special questionnaire has also been distributed to obtain a sample of miscellaneous expenses for the years 1929, 1933, and 1936.

Having deducted the miscellaneous expenses, the residue may be called the 'gross national product'. The next step is to estimate depreciation and depletion as a percentage of the fixed capital employed by the several groups. The gross national product less depreciation and depletion is regarded as the national income. It is not feasible to apply this treatment to all industrial groups of the Bureau's classification, but a growing proportion of the field is amenable to the method. Under the heading of real estate in the finance group, an estimate of the imputed rent of owned houses is included. The international balance of dividend and long-term interest payments is also deducted as a final adjustment.

(2) A second approach is by a summation of payments made to individuals. The normal source of information for this method is the tabulation of income tax returns. Such information forms the basis of the excellent estimates of national income prepared for the United Kingdom and the United States. However, the considerable expense involved in tabulation has militated against such elaborately detailed presentation of this material in Canada.

The census of industry furnishes data of the amount of salaries and wages paid, and wage data for decennial census years are available through the population census for each of the main industrial groups. The indexes of wage rates published by the Department of Labour and the monthly survey of employment conducted by the

Bureau, are useful in estimating earnings for the intercensal years where specific information is not otherwise available (see p. 767). The numbers of persons working on own account and employers as reported by the decennial census is valuable for estimating the withdrawals of entrepreneurs. Volumes X and XI of the Census Reports present pertinent data regarding wholesale and retail trade and a portion of the service field.

A sample of dividend and bond interest payments may be compiled from an examination of company accounts. The net amount of dividends paid by privately-owned companies as well as by corporations with public investment interest is also available. It is possible to estimate from census data the total amount of net rentals paid on dwellings. The contribution of government to the national income consists of the net interest paid on the funded debt and the salaries and wages, service and social pensions, compensation payments, and relief.

The aggregate paid to individuals is adjusted for business gains or losses. The latter signify the additions to or deductions from surplus by business concerns. After making the adjustment, the result is an estimate of the national income which should conform closely to the total prepared by the alternate production method.

The Bureau's present solution is to make two independent estimates of the national income for each year. One estimate is derived from a study of the separate industrial fields in which the income originates, the second is mainly an aggregate of incomes received by individuals with an adjustment for business gains or losses.

The computation of the national income by the two-fold method outlined above is in process as the Year Book goes to press, but is not yet ready for publication and the estimates based on the Survey of Production appearing in the edition of 1937 are not being extended pending the revision.

Income-Tax Assessment as a Measure of National Income.*—In those countries of the world where an income tax has been established for a considerable time the figures of the assessed income have been generally accepted as furnishing a guide both to the amount and to the distribution of the total national income by classes. Estimates of the national income, based upon income tax statistics, have been published, for example, in the United Kingdom and in the United States.

The War introduced the income tax into Canada in 1917. Under the Income War Tax Act, the returns of the incomes of individuals and corporations are filed in the year following the earning of the incomes. Further, since the fiscal year ends on Mar. 31, the bulk of the receipts from the income tax usually comes in during the first two or three months of the next following fiscal year. Thus the income tax received in the fiscal year ended Mar. 31, 1937, represents, in the main, income tax collected on 1935 income, and the income tax collected in the fiscal year ended 1936 represents, in the main, 1934 income. It is important that these facts should be kept in mind when considering income assessed in different years. Further, the particular provisions of the income tax existing at any particular time, and the amendments extending or contracting the scope of the income tax by raising or

* This material has been revised by the Income Tax Branch of the Department of National Revenue.

lowering the limit of taxable income, or increasing or lowering the allowances for children, etc., should also be borne in mind in the consideration of the following tables. Among these, Table 36 gives the grand total income of individuals and corporations assessed for the purpose of income war tax for the past seventeen years, while Table 37 gives this income by provinces for the past five years and Table 38 shows the amount of income tax collected by provinces in the past five years. Tables 39 and 40 analyse the payments of income tax in the past four years by size of income class and by occupation of the taxpayer, respectively.

36.—Income Assessed for the Purposes of the Income War Tax, by Individuals and Corporations, fiscal years ended Mar. 31, 1921-37.

Fiscal Year.	Individuals.		Corporations.		Total Income Assessment.
	No.	Assessment.	No.	Assessment.	
		\$		\$	\$
1921.....	190,561	¹	3,696	¹	912,410,429
1922.....	290,584	1,058,577,617	8,286	403,951,553	1,462,529,170
1923.....	281,182	823,100,878	6,010	269,307,047	1,092,407,925
1924.....	239,036	802,617,497	5,569	305,410,374	1,108,027,871
1925.....	225,514	701,892,820	6,236	297,267,428	999,160,248
1926.....	209,539	697,016,973	5,738	306,093,673	1,003,110,646
1927.....	116,029	465,689,900 ²	5,777	278,494,991	744,184,891
1928.....	122,026	604,736,116	6,121	435,496,832	1,040,232,948
1929.....	129,663	668,687,536	7,438	526,714,731	1,195,402,267
1930.....	142,154	781,174,030	7,957	544,019,414	1,325,193,444
1931.....	143,601	815,714,684	7,603	555,763,956	1,371,478,640
1932.....	133,621	660,107,257	6,010	332,498,963	992,606,220
1933.....	166,972	685,543,980	6,483	258,547,584	944,091,564
1934.....	203,957	617,717,251	8,913	211,614,313	829,331,564
1935.....	184,195	655,380,912	10,458	273,174,118	928,555,030
1936.....	199,102	714,333,603 ³	10,970	359,108,514	1,073,442,116 ³
1937.....	217,049	728,043,754	12,146	352,846,376	1,080,890,070

¹ Not segregated into individual and corporation groups for this year. ² In 1927 the exemption limits were raised from \$2,000 to \$3,000 for married, and from \$1,000 to \$1,500 for single persons.

³ Revised since the publication of the 1937 Year Book.

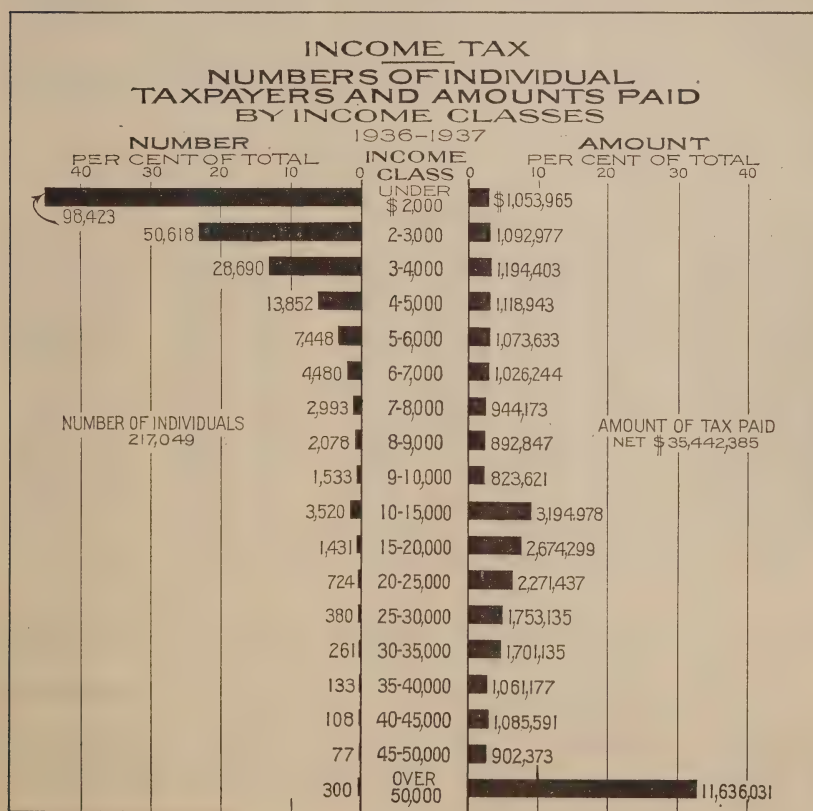
37.—Income Assessed for the Purposes of the Income War Tax, by Provinces, fiscal years ended Mar. 31, 1933-37.

Province.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
Prince Edward Island.....	2,015,664	2,072,019	2,256,109	4,579,652	4,446,650
Nova Scotia.....	23,699,355	19,701,482	21,405,900	21,794,087	23,969,857
New Brunswick.....	16,253,444	16,551,288	14,207,882	14,389,098	16,539,884
Quebec.....	259,566,516	179,807,900	273,987,869	357,486,710	331,710,154
Ontario.....	448,057,907	428,279,628	449,885,677	501,917,767	517,310,542
Manitoba.....	53,808,386	45,049,397	47,188,764	46,760,597	48,430,521
Saskatchewan.....	19,765,936	19,056,999	15,226,696	15,347,973	16,918,431
Alberta.....	32,757,215	43,652,512	35,653,360	35,171,837	36,833,766
British Columbia.....	87,124,464	73,972,698	67,822,116	74,959,621	83,771,834
Yukon.....	1,042,677	1,187,641	920,657	1,034,774	958,431
Totals.....	944,091,564	829,331,564	928,555,030	1,073,442,116	1,080,890,070

38.—Amounts of Income Tax Collected, by Provinces, fiscal years ended Mar. 31, 1933-37.

Province.	1933.	1934. ¹	1935. ¹	1936. ¹	1937. ¹
	\$	\$	\$	\$	\$
Prince Edward Island.....	84,860	128,932	329,667	426,893	872,985
Nova Scotia.....	889,349	910,801	957,893	1,206,481	1,375,274
New Brunswick.....	592,411	658,192	570,492	811,186	910,940
Quebec.....	21,452,067	20,153,390	20,483,134	25,205,466	29,301,603
Ontario.....	30,681,332	31,546,913	35,935,202	45,059,358	58,162,075
Manitoba.....	2,134,393	1,921,908	1,922,323	2,204,596	2,484,464
Saskatchewan.....	338,512	371,283	296,896	327,843	409,395
Alberta.....	1,408,126	1,390,425	1,298,740	1,599,511	1,850,705
British Columbia.....	4,082,526	3,872,376	4,526,254	5,512,408	6,738,986
Yukon.....	11,092	26,504	16,673	17,850	23,519
Head Office.....	392,029	418,448	470,792	338,211	235,296
Totals.....	62,066,697	61,399,172	66,808,066	82,709,803	102,365,242

¹ Includes the 5 p.c. tax on interest and dividends imposed in the 1933 fiscal year. (See p. 895-6.)



39.—Numbers of Individual and Corporate Taxpayers, by Size of Income and Amount of Taxes Paid under the Income War Tax Act, fiscal years ended Mar. 31, 1934-37.

Income Class.	1934.		1935.		1936.		1937.	
	No.	\$	No.	\$	No.	\$	No.	\$
INDIVIDUALS.								
Under \$2,000.....	93,316	989,083	85,385	950,120	89,724	987,387	98,423	1,053,965
\$ 2,000 to \$ 3,000..	46,207	1,015,183	41,918	938,923	46,198	1,042,133	50,618	1,092,977
\$ 3,000 to \$ 4,000..	27,778	1,096,121	24,127	1,023,176	26,804	1,125,428	28,690	1,194,403
\$ 4,000 to \$ 5,000..	13,312	995,500	11,672	987,367	12,766	1,049,783	13,852	1,118,943
\$ 5,000 to \$ 6,000..	6,670	874,915	6,238	900,743	6,759	976,905	7,448	1,073,633
\$ 6,000 to \$ 7,000..	4,082	810,922	3,729	808,817	4,267	948,545	4,480	1,026,244
\$ 7,000 to \$ 8,000..	2,770	771,434	2,464	761,327	2,816	878,603	2,993	944,173
\$ 8,000 to \$ 9,000..	1,937	743,943	1,777	757,751	1,898	834,797	2,078	892,847
\$ 9,000 to \$10,000..	1,445	718,510	1,229	667,977	1,422	767,668	1,533	823,620
\$10,000 to \$15,000..	3,284	2,735,469	2,815	2,402,676	3,303	3,033,935	3,520	3,194,978
\$15,000 to \$20,000..	1,254	2,032,264	1,198	1,982,488	1,290	2,357,644	1,431	2,674,299
\$20,000 to \$25,000..	665	1,881,997	558	1,645,480	654	2,029,986	724	2,271,437
\$25,000 to \$30,000..	349	1,439,868	329	1,263,474	345	1,548,875	380	1,753,135
\$30,000 to \$35,000..	228	1,289,887	211	1,124,562	236	1,485,413	261	1,701,135
\$35,000 to \$40,000..	162	1,114,983	132	911,269	137	1,071,460	133	1,061,177
\$40,000 to \$45,000..	116	947,111	70	651,415	101	996,645	108	1,085,591
\$45,000 to \$50,000..	75	757,856	84	837,922	78	866,677	77	902,373
\$50,000 or over....	307	8,785,854	259	6,458,127	304	11,055,666	300	11,636,031
Totals.....	203,957	29,000,900	184,195	25,073,614	199,102	33,057,550	217,049	35,500,961
Unclassified amounts.....	—	501,980	—	450,950	—	309,337	—	232,669
Refunds.....	203,957	29,502,880	184,195	25,524,564	199,102	33,366,887	217,049	35,733,630
	—	319,165	—	323,172	—	383,655	—	291,245
Net Totals...	203,957	29,183,715	184,195	25,201,392	199,102	32,983,232	217,049	35,442,385

CORPORATIONS.

Under \$2,000.....	4,575	331,105	6,167	479,820	6,306	547,271	6,671	659,781
\$ 2,000 to \$ 3,000..	1,040	209,587	885	280,660	776	309,947	950	381,317
\$ 3,000 to \$ 4,000..	542	199,204	482	249,672	479	259,761	558	328,084
\$ 4,000 to \$ 5,000..	337	185,218	314	226,180	384	271,588	403	303,870
\$ 5,000 to \$ 6,000..	252	176,256	251	201,651	289	238,891	298	284,199
\$ 6,000 to \$ 7,000..	188	166,846	177	175,257	193	199,553	244	258,323
\$ 7,000 to \$ 8,000..	142	119,848	169	170,205	179	196,966	191	237,978
\$ 8,000 to \$ 9,000..	131	156,980	129	170,536	155	214,176	155	213,394
\$ 9,000 to \$10,000..	105	131,742	113	160,873	114	165,293	155	241,772
\$10,000 to \$15,000..	342	567,791	366	677,923	407	774,018	522	1,060,377
\$15,000 to \$20,000..	204	493,291	247	575,809	252	651,499	354	986,321
\$20,000 to \$25,000..	156	483,036	155	503,561	188	602,834	199	737,521
\$25,000 to \$30,000..	97	340,525	118	412,059	151	585,823	169	688,609
\$30,000 to \$35,000..	91	447,571	98	467,861	105	511,228	126	651,375
\$35,000 to \$40,000..	61	326,112	58	322,354	79	387,046	105	605,868
\$40,000 to \$45,000..	50	272,523	63	376,584	69	390,267	64	449,998
\$45,000 to \$50,000..	54	416,218	43	321,751	67	455,800	90	629,706
\$50,000 or over....	540	22,939,240	617	30,590,016	773	36,169,233	892	49,967,659
Totals.....	8,913	27,969,757	10,458	36,363,794	10,976	42,933,281	12,146	58,690,403
Unclassified amounts.....	—	18,869	—	30,219	—	28,874	—	2,627
Refunds.....	8,913	27,988,628	10,458	36,394,013	10,976	42,962,155	12,146	58,693,030
	—	602,804	—	603,774	—	433,184	—	680,187
Net Totals...	8,913	27,385,822	10,458	35,790,239	10,976	42,518,971	12,146	58,012,843

¹ Totals include 6 corporations paying \$6,664 in taxation, grouped to conceal net income and identity of taxpayers.

² Totals include 6 corporations paying \$1,022 in taxation, grouped to conceal net income and identity of taxpayers.

³ Totals include 4 corporations paying \$2,088 in taxation, grouped to conceal net income and identity of taxpayers.

⁴ Totals include corporations paying \$4,251 in taxation, grouped to conceal net income and identity of taxpayers.

40.—Income Tax Paid,¹ by Occupations of the Taxpayers, fiscal years ended Mar. 31, 1934-37.

Occupation.	1934.		1935.		1936.		1937.	
	No.	\$	No.	\$	No.	\$	No.	\$
INDIVIDUALS.								
Agrarians.....	262	22,334	416	24,083	694	46,609	921	76,395
Professionals.....	5,941	2,008,471	5,800	1,609,621	6,579	1,967,035	6,992	1,903,221
Employees.....	167,737	11,340,010	149,418	10,930,997	159,972	12,474,844	174,349	13,506,473
Merchants, retail..	4,960	527,693	5,104	552,256	6,417	748,782	7,400	867,710
Merchants, whole-sale.....	575	217,233	620	201,435	832	318,988	878	317,214
Manufacturers.....	467	129,978	442	112,466	547	164,014	596	170,196
Natural resources..	77	11,514	99	39,819	155	41,559	161	32,561
Financial.....	11,753	7,512,473	11,673	6,379,505	12,995	8,931,621	13,871	9,980,752
Personal corporations.....	618	2,768,992	584	2,351,883	538	4,433,134	541	4,502,616
Family corporations.....	1,576	1,354,613	116	154,329	14	31,247	Nil	-
All others.....	9,991	3,107,589	9,923	2,717,220	10,359	3,899,717	11,340	4,143,823
Unclassified.....	-	501,980	-	450,950	-	309,337	-	232,669
Totals.....	203,957	29,502,880	184,195	25,524,564	199,102	33,366,887	217,049	35,733,630
Refunds.....	-	319,165	-	323,172	-	383,655	-	291,245
Net Totals...	203,957	29,183,715	184,195	25,201,392	199,102	32,983,232	217,049	35,442,385

CORPORATIONS.

Agrarians.....	71	19,146	92	32,344	114	56,859	132	67,696
Merchants, retail..	1,427	1,332,731	1,645	1,542,673	1,854	2,103,684	2,238	2,632,761
Merchants, whole-sale.....	874	1,491,913	1,086	2,057,735	1,150	2,418,014	1,308	3,029,043
Manufacturers.....	1,897	11,849,040	2,250	15,079,937	2,727	21,264,276	3,069	26,613,505
Natural resources..	198	3,017,750	186	7,848,415	214	4,317,700	258	10,543,396
Financial.....	2,853	4,688,265	3,544	4,339,441	2,806	5,748,756	2,862	7,217,403
Transportation and public utilities...	434	3,607,251	463	3,695,881	555	5,114,318	586	6,071,188
All others.....	1,159	1,963,661	1,192	1,767,368	1,550	1,909,674	1,702	2,510,410
Unclassified.....	-	18,869	-	30,219	-	28,874	-	2,627
Totals.....	8,913	27,988,626	10,458	36,394,013	10,970	42,962,155	12,146	58,693,030
Refunds.....	-	602,804	-	603,774	-	443,184	-	680,187
Net Totals...	8,913	27,385,822	10,458	35,790,239	10,970	42,518,971	12,146	58,012,843
Grand Totals, Individuals and Corporations...	-	56,569,537	-	60,991,631	-	75,502,202	-	93,455,223

¹ Exclusive of special 5 p.c. tax on interest and dividends; see text accompanying Table 41.

Table 41 shows the amount received from the special 5 p.c. tax of 1933 (c. 41, 1932-33) imposed at the source on interest (if paid solely in Canadian funds) and dividends paid by Canadian debtors to non-residents of Canada, and on interest and dividends received by Canadian residents by way of bearer coupons or cheques where such are payable by Canadian debtors, optionally or otherwise, in foreign currencies, and such coupons or cheques are cashed in a currency which is at a premium over Canadian funds. The receipts are classified by provinces, no further classification being available.

41.—Amount Received from Special Five Per Cent Tax on Interest and Dividends, fiscal year ended Mar. 31, 1937.

Province.	Amount of Tax Received.	Percentage of Total.
	\$	p.c.
Prince Edward Island.....	502,316	5.64
Nova Scotia.....	50,084	0.56
New Brunswick.....	12,006	0.13
Quebec.....	1,967,221	22.08
Ontario.....	5,940,309	66.66
Manitoba.....	56,821	0.64
Saskatchewan.....	12,093	0.14
Alberta.....	50,206	0.57
British Columbia.....	318,958	3.58
Yukon.....	Nil	—
Totals.....	8,910,014	100.00

Subsection 3.—British and Foreign Capital Invested in Canada and Canadian Capital Invested Abroad.*

Revised estimates of British and foreign investments in Canada and Canadian investments in other countries have been issued recently by the Internal Trade Branch of the Dominion Bureau of Statistics. As a result of continued investigations, more complete information has become available. Because of the great variety of forms these investments take and the difficulties inherent in arriving at satisfactory valuations, along with the continual changes in ownership in some cases, these estimates should be considered as approximations rather than exact representations. They are, however, indicative of the general proportions of the investments involved. In using these statistics it should be recognized that changes in value from one year to another do not always reflect actual capital movements between Canada and other countries as there are important changes in the value of 'equity' investments arising from internal operations, such as reinvested profits, for instance, which are quite independent of external factors.

The present investigation has been carried back as far as 1926 and revised statistics of international investments are shown for the years from 1926 to 1935 in Tables 42 and 43. Very marked changes have taken place in Canada's international indebtedness during the present century. The industrial expansion in Canada in the years preceding the Great War was closely related to the heavy inflow of capital from Great Britain. In 1914 the value of British investments in Canada was not much different from the value of British investments as shown in the accompanying tables in recent years, although slightly higher than in 1926. The rapid growth in United States investments in Canada took place after 1914. Part of this increase in the investments of the United States in Canada came after 1926 and is reflected in Table 42 which shows a change in these investments between 1926 and 1930 of from \$3,161,200,000 to \$4,298,400,000. This influx of capital followed two contrasting channels. A large part of the capital was raised through the sale of new issues in New York but the capital coming to Canada through the channel of direct investment was also especially heavy and this capital invested directly in Canada has given United States investments in Canada a particular

*Revised by Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics. The subject is treated more fully in a bulletin "British and Foreign Capital Invested in Canada and Canadian Capital Invested Abroad, 1926-36" obtainable from the Dominion Statistician. For a list of the publications of this Branch, see Chapter XXIX.

character. Since 1930 there has been a reduction in the value of United States investments in Canada, as a result of the redemption of Canadian securities owned in the United States, changes in the values of equity investments in Canada, and other factors.

In Table 44 there is shown in detail the distribution in 1936 of British and foreign capital invested in Canada. The indebtedness of Canadian governments abroad amounted to \$1,688,700,000 of which \$524,200,000 represented government securities held by British investors and \$1,161,300,000 government securities held by residents of the United States. The total non-resident investments in Canadian railways, \$1,637,000,000, was about the same as the total government securities held abroad, but the British investments predominated in this group, being \$1,068,300,000 compared with a United States investment of \$548,800,000. In most other classes of investment the amounts owned in the United States were larger than the British although the latter were generally substantial.

In appraising Canada's international indebtedness, consideration must also be given to Canadian investments abroad. These have grown from \$1,352,800,000 in 1926 to \$1,671,500,000 in 1936, the principal growth being in Canadian portfolio holdings of United States securities although considerable amounts of the securities of Latin American and European governments were also acquired in the earlier part of the period. The increase in the holdings of these miscellaneous investments in other countries has been greater than the increase in total Canadian investments abroad, as there has been a very marked reduction in the net assets of the Canadian banks in other countries during this period.

For 1936 Canadian capital in other countries is estimated at \$1,671,500,000. The largest part of this, about \$1,000,000,000, was invested in the United States and was principally in the form of direct investments in railways and branch and subsidiary plants and in portfolio investments in the stocks and bonds of United States governments and corporations. Investments in other countries include a miscellaneous item of \$383,000,000 representing an estimate of Canadian holdings of other foreign securities such as the bonds of Latin American and European governments. Direct investments in other countries, largely in the British West Indies and Latin America, amounted to \$173,000,000.

Of further interest in considering the relative importance of Canada's international indebtedness in the nation's economic life is the place Canadian capital occupies in the total amount of capital invested in Canada. It is estimated that the amount of capital invested in Canada is about \$18,000,000,000. This sum includes the bonded indebtedness of Dominion, provincial and municipal governments, investments in railways, all manufacturing concerns, mines and metal industries, public utilities, trading establishments, finance, insurance, land and mortgages. It does not include private capital in domestic enterprises such as farms, homes, etc. Of this sum, it is estimated that 62 p.c., or over \$11,000,000,000, is owned in Canada, 22 p.c., or \$3,984,400,000, in the United States; 15 p.c., or \$2,725,000,000, in the United Kingdom and less than 1 p.c. or, \$124,000,000, in other countries.

Investments of Canadian Insurance Companies Operating Abroad.—An important change in the revised figures shown in Tables 42 to 45 is the omission of an item previously included, *viz.*, "Investments of Canadian Insurance Companies Operating in Other Countries". These insurance investments, so-called, are not investments of quite the same character as the other items. The large assets in other countries held by Canadian insurance branches in those countries

have against them, besides ordinary liabilities, the fiduciary interest of the policyholders. In fact when the prospective claims of policyholders are considered it appears that on balance there is a small net investment of these branches in Canada rather than a Canadian investment abroad. This is possible because the assets underlying the reserve funds need not all be held abroad. On the other hand, the fact that assets can be transferred between countries gives an importance to them as a factor in capital movements. Again, British and foreign securities held by Canadian companies in Canada have already been included as Canadian investments abroad. On account of the ambiguity of this item and the fact that it has already been included in another form, therefore, it has not been repeated in the tables.

With regard to British and foreign insurance investments in Canada, since there exist net assets in Canada over all liabilities including reserves against future claims of Canadian policyholders the residual amount is shown as a *bona fide* investment in Canada in Tables 42 and 44.

42.—Estimated British and Foreign Capital Invested in Canada, Classified According to Main Types, as at Dec. 31, 1926-35.

NOTE.—Net equities of policyholders, etc., outside of Canada invested in Canada through Canadian insurance companies operating abroad are not shown in this table for the reason given in the text above. The omission does not materially affect the totals.

Type of Investment.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
'000,000	'000,000	'000,000	'000,000	'000,000	'000,000	'000,000	'000,000	'000,000	'000,000	'000,000
Government Securities—										
Dominion.....	632.0	628.1	618.6	571.6	675.0	627.4	680.3	741.9	749.4	807.3
Provincial.....	419.7	460.7	471.9	520.8	590.2	604.2	606.6	570.0	554.9	530.8
Municipal.....	372.1	393.3	393.3	400.3	429.5	437.2	406.6	392.4	389.4	379.6
	1,423.8	1,482.1	1,483.8	1,492.7	1,694.7	1,668.8	1,693.5	1,704.3	1,693.7	1,717.7
Public Utilities—										
Railways.....	1,573.4	1,602.5	1,636.0	1,771.0	1,835.1	1,896.3	1,874.2	1,859.2	1,825.6	1,683.0
Other (traction, light, heat, power, telephone, etc.).....	466.3	515.8	562.1	620.0	660.8	698.5	736.1	751.9	766.7	780.0
Manufacturing—										
Wood and paper products.....	473.6	513.0	569.8	567.0	596.0	525.5	484.2	458.4	453.6	462.0
Metal industries.....	396.3	421.8	458.6	502.6	501.7	456.8	413.3	401.5	413.8	423.0
All other manufacturing industries.....	451.4	482.9	516.0	546.1	521.3	495.8	460.2	459.1	475.8	494.0
Mining.....	288.0	299.0	355.0	363.0	376.0	355.0	333.0	335.0	350.0	326.0
Merchandising and service.....	235.4	241.8	250.4	255.8	251.5	237.5	225.8	219.4	222.0	226.8
Insurance.....	93.8	106.0	102.0	104.6	142.5	151.7	160.5	161.7	198.9	220.0
Finance and mortgage corporations.....	228.7	254.4	287.2	322.9	321.3	293.9	286.4	283.4	285.0	290.0
Miscellaneous (agricultural lands, summer homes, prospecting, assets administered for persons or corporations residing outside Canada, etc.).....	260.0	265.0	278.0	290.0	295.0	288.0	287.0	280.0	280.0	275.0
Grand Totals (Great Britain, United States and Other Countries).....	5,890.7	6,184.3	6,498.9	6,835.7	7,195.9	7,067.8	6,954.2	6,913.9	6,965.1	6,897.5
Totals, British Capital.....	2,597.8	2,628.3	2,693.6	2,764.2	2,766.0	2,687.1	2,631.7	2,674.4	2,729.5	2,729.3
Totals, United States Capital.....	3,161.2	3,423.8	3,664.6	3,926.5	4,298.4	4,254.5	4,198.3	4,115.2	4,112.1	4,044.6
Totals, Capital of Other Countries.....	131.7	132.2	140.7	145.0	131.5	126.2	124.2	124.3	123.5	123.6

43.—Estimated Canadian Investments Abroad as at Dec. 31, 1926-35.

NOTE.—Investments held abroad by Canadian insurance companies operating in other countries are not shown in this table for the reason given on p. 898. The omission in its net effect does not materially affect the totals.

Type of Investment.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
	\$ '000,000	\$ '000,000	\$ '000,000	\$ '000,000	\$ '000,000	\$ '000,000	\$ '000,000	\$ '000,000	\$ '000,000	\$ '000,000
Canadian Government credits.....	36.1	32.4	31.1	30.9	30.7	30.5	30.5	30.5	30.5	30.5
Net assets of Canadian banks outside Canada....	370.3	354.2	267.6	179.8	180.2	152.5	114.8	90.9	109.7	109.6
Foreign securities held in Canada by Canadian insurance companies.....	91.4	124.2	156.5	184.6	156.7	154.5	144.2	136.8	142.2	162.8
Direct investments.....	397.0	401.5	412.0	423.5	443.0	445.0	446.0	447.0	449.0	453.0
Miscellaneous investments..	458.0	602.0	725.0	810.0	842.0	856.0	853.0	865.0	874.0	884.0
Grand Totals.....	1,352.8	1,514.3	1,592.2	1,628.8	1,652.6	1,638.5	1,588.5	1,570.2	1,605.4	1,639.9
Totals, Capital Invested in the United Kingdom.....	59.6	61.2	53.3	50.6	67.7	50.6	44.7	49.0	47.4	50.8
Totals, Capital Invested in United States.....	778.0	870.6	917.7	929.8	933.1	928.8	906.1	875.7	921.1	963.4
Totals, Capital Invested in Other Countries.....	515.2	582.5	621.2	648.4	651.8	659.1	637.7	645.5	636.9	625.7

44.—Estimated British and Foreign Capital Invested in Canada as at Dec. 31, 1936.

NOTE.—Net equities of policyholders, etc., outside of Canada invested in Canada through Canadian insurance companies operating abroad are not shown in this table for the reason given on p. 898. The omission does not materially affect the totals.

Type of Investment.	Invested by Residents of—			Total.
	United Kingdom.	United States.	Other Countries.	
Government Securities—	\$'000,000	\$'000,000	\$'000,000	\$'000,000
Dominion.....	318.8	487.5	1	806.3
Provincial.....	67.8	447.7	3.2 ¹	518.7
Municipal.....	137.6	226.1	1	363.7
Public Utilities—	524.2	1,161.3	3.2 ¹	1,688.7
Railways.....	1,068.3	548.8	19.9	1,637.0
Other (traction, light, heat, power, telephone, etc.)..	184.8	577.6	7.6	770.0
Manufacturing—				
Wood and paper products.....	94.3	369.6	1.1	465.0
Metal industries.....	78.2	345.2	4.6	428.0
All other manufacturing industries.....	204.9	286.9	8.2	500.0
Mining.....	89.0	244.0	7.0	340.0
Merchandising and service.....	73.6	147.2	4.2	225.0
Insurance.....	86.5	121.4	2.1	210.0
Finance and mortgage corporations.....	161.3	97.4	36.3	295.0
Miscellaneous (agricultural lands, summer homes, prospecting, assets administered for persons or corporations residing outside Canada, etc.).....	160.0	85.0	30.0	275.0
Grand Totals.....	2,725.1	3,984.4	124.2¹	6,833.7

¹ Some indeterminate parts of the amounts shown as owned in the United Kingdom and possibly some shown as owned in the United States are owned by residents of other countries.

45.—Estimated Canadian Investments Abroad as at Dec. 31, 1936.

NOTE.—Investments held abroad by Canadian insurance companies operating in other countries are not shown in this table for the reason given on p. 898. The omission in its net effect does not materially affect the totals.

Type of Investment.	In the United Kingdom.	In United States.	In Other Countries.	Total.
	\$'000,000	\$'000,000	\$'000,000	\$'000,000
Canadian Government credits.....	Nil	Nil	30.5	30.5
Net assets of Canadian banks held outside Canada....	12.6	86.0	8.4	107.0
Foreign securities held in Canada by Canadian insurance companies.....	13.9	142.5	26.6	183.0
Direct investments.....	14.0	270.0	173.0	457.0
Miscellaneous investments.....	10.0	501.0	383.0	894.0
Grand Totals.....	50.5	999.5	621.0	1,671.5

CHAPTER XXII.—CURRENCY AND BANKING; MISCELLANEOUS COMMERCIAL FINANCE.

In this chapter are assembled the statistics regarding financial institutions and transactions, other than those pertaining to insurance which are dealt with separately in Chapter XXIII. The important subject of currency and banking is treated in Part I of the chapter, while trust and loan companies, sales of Canadian bonds, corporation dividends, and foreign exchange, constitute sections of the miscellaneous commercial finance covered in Part II.

PART I.—CURRENCY AND BANKING.

Section 1.—Historical Sketch.

The early history of the currency of Canada, both of the central provinces and of the maritime colonies, from the time of the first settlements to Confederation, is the story of a polyglot currency and the involved difficulties of determining exchange rating for the various coins and pieces.

The salient influences of early political and commercial affiliations upon the types of currency in use are reviewed below.

The Development of Currency in New France.

So long as trade remained in the hands of a few private traders, barter was the rule. Beads and other trinkets which appealed to the Indians, blankets and other useful articles, were traded directly for furs. With the further development of the colony during the French *régime*, while barter still remained, the growing complexity of social organization and trade emphasized the need for a convenient monetary unit, which was met by the adoption of French currency, but, in order to retain in the colony the gold and silver coin which arrived there, it was 'over-rated' to the extent of about one-third of its value in France. Thus there was a dual valuation of the same coinage, officially recognized as 'money of France' and 'money of the country'. Copper coins were given an even higher over-rating. Nevertheless, money remained very scarce and at one time wheat at current market rates was made legal tender in spite of the difficulties and hindrances to trade inherent in fluctuating values. The illicit fur traffic with English fur traders resulted in the introduction of Spanish silver dollars as well as various worn and mutilated coins to help fill the need. In 1681 foreign coin was officially recognized but it was stipulated by ordinance that it should pass by weight; it was given the one-third increase in value which custom had established for French currency.

One of the earliest forms of fiat paper money in the western world was introduced into New France in 1685. This 'card money', as it was termed, was not introduced primarily to meet the lack of circulating media (although, incidentally, it did relieve the prevailing scarcity) so much as an official expedient to meet the pay of soldiers until the annual Royal supplies were forthcoming. The first issue was backed by such annual supplies and was duly redeemed when the supplies arrived, but five years later another issue was made without such backing. This was the beginning of an inflationary move. By 1713, the amount of such unbacked currency outstanding was such as to reduce trade to a chaotic condition and confidence was seriously undermined. Later, card money was again resorted to, but on a sounder basis. The expanding needs of the Treasury, however, unfortunately brought about

the introduction and unlimited use of *ordonnances* and *billets* which quickly undermined the financial structure again, and at the time of the cession, the total amount of paper money outstanding was estimated at 80 million livres. It was because none of this paper money in its later issues was paid in full, and much of it was not redeemed in any manner, that the people of Old Canada resisted so firmly the efforts made in 1792, 1807, and 1808 to establish banks of issue under the authority of Parliament.

In 1721 the first effort was made to establish a special currency for the colony, but this was limited to copper coins and was not successful.

The British Period to Confederation.

The period of military occupation (1759-1763) was marked by conditions of chaos in the matter of currency, but with the revival of the business activity of Montreal and Quebec with Nova Scotia and Massachusetts the currency standards of the latter were adopted and the Spanish dollar again made its appearance. It became the medium by which exchanges were balanced with Britain. Normally, the Spanish dollar was valued at 4s. 6d. sterling, but the tendency was to over-value it and in colonial ratings it varied between 4s. 6d. to as much as 7s. or 8s. In Nova Scotia, for instance, the customary rating for the Spanish dollar was 5s., while in New York colony it was 7s. 6d. to 8s. Corresponding margins of value prevailed in regard to other coins in the different colonies. The former of these two standard ratings, known as the Halifax currency, was accepted by Quebec, and Montreal adopted the latter, known as the York currency. Of course, there was much confusion and hindrance to trade between Montreal and Quebec as a result of the adoption of the dual standard.

In order to iron out the difficulties, Governor Murray passed an ordinance which established an official rating for the Province of Canada. The Spanish dollar was rated at 6s., the French crown at 6s. 0½d., and the British shilling at 1s. 4d. The custom of cutting up larger coins to make small change, which had grown up in the past, was prohibited. To meet such urgent needs for small coin, the merchants themselves issued bills due or 'bons' good at their face value for merchandise. Such 'bons' were the true forerunners of the bank note. The ratings given by Governor Murray were a compromise which was not permanently acceptable and proved unsatisfactory.

After the outbreak of the American Revolution in 1775, Quebec influences prevailed and Halifax currency became standard, although the use of York currency persisted in Upper Canada (where the United Empire Loyalists supported its use) until 1821, when it was deprived of legal recognition by an Act of Upper Canada.

In order to pay the expenses of the War of 1812, army bills issued against the credit of the United Kingdom were circulated. These, in the main, bore interest and were convertible into bills of exchange on the United Kingdom; they were redeemed within the ensuing four or five years. These army bill issues tended to renew confidence in paper money and familiarize the people with its use, thus paving the way for the note issues of the early banks after 1817. These first banks were created in Lower Canada, at first as private corporations but obtained charters a few years later. The charters granted to the early banks in Lower Canada are the foundations upon which subsequent improvements have been built.

In the early days of banking, one of the chief functions of banks was to issue promissory notes payable to the bearer on demand; where the banks' credit was

good these notes passed freely from hand to hand, and were the chief circulating media in the Canadas. In some cases bank notes were preferred to those issued by the colonial governments.

The Bank of Montreal began business towards the end of 1817 as a private institution. In the following year the Quebec Bank was established as well as the Bank of Canada at Montreal. These three Lower Canada institutions obtained their charters in 1822. In Upper Canada the Bank of Upper Canada was established at Kingston in 1818, but the first bank to receive a charter was the second Bank of Upper Canada established at York (Toronto) in 1821. In Nova Scotia, unsuccessful efforts were made as early as 1801 to form banks, and in 1812 the Government began to issue treasury notes not bearing interest and re-issuable, sometimes redeemable and sometimes not. This policy was continued down to Confederation. It seems to be in part because of these treasury issues of notes that no bank was started in Nova Scotia before 1825, when the Halifax Banking Company (private) commenced business. The Bank of Nova Scotia received a regular charter in 1832. A bank, the Bank of New Brunswick, was incorporated in New Brunswick in 1820.

Before the union of the two Canadas, the privilege of issuing paper money had been enjoyed almost entirely by the banks alone. Lord Sydenham now proposed a provincial bank of issue with the chartered banks gradually relinquishing the right to note issue, and Hincks,* a young financier of promise, became chairman of the Joint Committee on Currency and Banking established in 1841. This Committee supported the provincial bank idea in principle. The chartered banks, of course, opposed it, and the bill was ultimately defeated, but the principle reappeared in subsequent measures and ultimately became the basis of the Dominion note issues. Lord Sydenham and Hincks did much, nevertheless, to strengthen and control the banking system.

A period of crisis in 1848-49 forced the adoption of a policy which led to the withdrawal from the banks of the right to issue notes of lower denominations than five dollars. The Government also now issued provincial debentures to the amount of one million dollars payable on demand. They were made acceptable in all payments due the Government and were reissuable. This is often regarded as the introduction of government paper into the currency system of the country, although, as already noted, Nova Scotia had issued government paper in 1812. Its success led to the revival of the project for a provincial bank of issue and in 1850 the Free Banking Act, designed to restrict note issue privileges and so reduce the number of different media of exchange, was passed, but the chartered banks would not agree to avail themselves of its provisions, nor were conditions in Canada altogether ripe for a change from the elastic system of note issue which had now become established in spite of the fact that, from the point of view of the note-holding public, the proposed system would have been safer.

Between 1840 and 1867 the problem of establishing a uniform metallic currency standard for united Canada was also dealt with. The majority of Canadians strongly favoured the United States decimal system and Hincks declared in its favour. Authorities in the United Kingdom, on the other hand, pressed for the sterling system. In 1853 and in 1858 the decimal system was adopted in the Canadas, and thus duplication of sterling and decimal systems was removed and the Canadian dollar, equivalent to the United States dollar, was established with the sovereign as legal tender. After 1860, the official accounts in Nova Scotia and New Brunswick were kept according to the decimal system.

*Later, as Sir Francis Hincks, he was Dominion Minister of Finance (1869-73). His influence on the development of Canadian banking was very marked until his death in 1885.

The Development of Currency and Banking after Confederation.

Currency Acts.—At Confederation, jurisdiction over currency passed to the Dominion Government. By the Uniform Currency Act of 1871 (34 Vict., c. 4), the decimal currency was extended throughout the Dominion; the British sovereign, rated at \$4.86 $\frac{2}{3}$, became the standard coin and the United States eagle was made legal tender for \$10, while authority was given to coin a Canadian \$5 gold piece. No Canadian gold coinage was issued, however, prior to the establishment of the Canadian branch of the Royal Mint in 1908, the first coins struck being sovereigns similar to those of the United Kingdom, but with a small 'C' identifying them as having been coined in Canada. In May, 1912, the first Canadian \$10 and \$5 gold pieces were struck, but the Canadian gold coinage has so far been limited in amount, since Canadians have generally preferred Dominion notes to gold for use within the country, and, when gold is needed for export, bullion or British and United States gold coin serve the purpose equally well.

The currency system established by this Act was very little changed until the Currency Act of 1910 which made the standard a fixed weight of fine gold instead of the British sovereign, the latter becoming legal tender.

In respect to paper currency, the provisions of the Provincial Note Act of 1866 were extended to the new Dominion in 1868, and 'Dominion' notes came into being. After 1870 such notes could be issued to the amount of \$9,000,000 against a 20 p.c. specie reserve (\$2,000,000 reserve was required for the entire \$9,000,000) and notes in excess of this were to have 100 p.c. specie reserve. Dominion notes which were legal tender were in circulation side by side with bank-note issues which were not legal tender. In 1880 the basis of the present system was definitely established (see below, p. 904, and under heading Chartered Bank Notes, pp. 913-914).

The Bank Act.—After tentative legislation in 1867, the Bank Act of 1870 provided that new banks must have a minimum paid-up capital of \$200,000; at least 20 p.c. of the subscribed capital had to be paid up in each year after the commencement of business. A proposal to limit the liabilities of banks in relation to capital and specie and Government debenture holdings was not translated into legislation. Bank notes in circulation were not to exceed the amount of paid-up capital. The right to issue notes under \$4 was withdrawn, largely in consideration of the abolition of the tax of 1 p.c. on note circulation. If possible up to 50 p.c., but in no case less than one-third, of a bank's cash reserves were to be held in Dominion notes. Dividends were limited to 8 p.c. until or unless the bank's reserve fund was the equivalent of 20 p.c. of its paid-up capital. In case of the failure of a bank, double liability of shareholders became enforceable without waiting for the realization of the bank's general assets. Banks were required to transmit certified lists of shareholders annually, to be laid before Parliament. Any existing bank was permitted, on the authority of the shareholders, to apply for an extension of its charter, and the Governor in Council, upon the recommendation of the Minister of Justice and the Treasury Board, was empowered to extend such charter to 1881. Any suspension by a bank of payment of its liabilities for a period of 90 days would constitute insolvency, and operate as a forfeiture of its charter.

In 1871 the first comprehensive Banking Act of the Dominion was passed. A large part of the statute was devoted to the re-enactment and consolidation of legislation already in force, although the measure of 1870 contained the main features of the Government's policy. The procedure relative to extension of charters laid down in the preceding year was superseded by this Act, which became the charter

of the banks until July 1, 1881, that date being set in contemplation of regular decennial revisions. No new bank was permitted to commence business with less than \$500,000 capital *bona fide* subscribed and \$100,000 similarly paid up, with the further proviso that at least \$200,000 must be paid up within two years after commencement of business. The sections respecting loans against warehouse receipts, etc., were thoroughly revised and difficulties of procedure removed. Banks were permitted to take security on commodities in store pending marketing, and also while undergoing conversion from the raw to the finished state. Advances were allowed upon security of shares of other banks. It was provided that the rate of interest or discount charged by a bank should not exceed 7 p.c. and that no higher rate should be recoverable. Monthly returns of assets and liabilities were required. Certain technical amendments were made to the Bank Act in 1872, 1873, and 1875. In 1879 the power to lend upon the security of shares of other banks was repealed.

At the first general revision of the Bank Act in 1880 (effective 1881), a note holder was definitely recognized as a preferred creditor, claims of the Dominion and Provincial Governments, respectively, ranking next in order of preference. Banks were prohibited from issuing notes under \$5, higher denominations to be multiples of this sum. Dominion notes were now to constitute not less than 40 p.c. of the bank's cash reserves. Monthly returns of a more detailed character were to be made. The Act was amended in 1883 to enforce more effectively the prohibitions, restrictions, and duties already imposed upon the banks. The use of certain titles by private bankers not operating under the provisions of the Act was prohibited.

At the revision of 1890 (effective 1891), it was stipulated that not less than \$250,000 capital must be paid up before a certificate permitting a bank to commence business could be issued by the Treasury Board. A period of one year from the date of the charter was allowed for the payment of the capital and the carrying out of other preliminaries. Dividends were not to exceed 8 p.c. until or unless the reserve fund was the equivalent of 30 p.c. of the paid-up capital. A fund known as the "Bank Note Circulation Redemption Fund" was established, consisting of deposits made by the banks with the Minister of Finance of amounts equal to 5 p.c. of their average note circulation, such deposits to be subject to adjustment annually, and to constitute a guarantee of the payment of all notes of a suspended bank with interest at 6 p.c. from the date of suspension until the date when their redemption was undertaken by the liquidator. Failing action by the liquidator within two months, the Minister of Finance was authorized to redeem the notes out of the fund, and such outlay, if not made good out of the assets of the failed bank, was to be reimbursed by the contributing banks *pro rata* to their contributions. Another major change gave the banks, in certain classes of loans, the same legal power to take security over the borrowers' goods as had previously been granted by warehouse receipts. This enactment served to make general and more clear principles already recognized by previous legislation and practice. Directors' qualifications were set out more clearly and it was now provided that a majority only of directors, instead of all, need be British subjects. Penalties for excess note circulation were made more severe.

The revision of 1900 (effective 1901) recognized the Canadian Bankers' Association as an agency in the supervision and control of certain activities of the banks. It was charged, under the Treasury Board, with the responsibility of supervising the printing and distribution of notes to the banks and their issue and destruction; also with control over clearing houses and the appointment of curators to supervise

the affairs of suspended banks. The amended Act also included provisions permitting one bank to sell its assets to another. More detailed monthly returns were required and the interest on notes of failed banks was reduced from 6 p.c. to 5 p.c. In 1908, after the financial crisis of 1907, provision was made for emergency circulation during the crop-moving season from October to January, when banks were allowed to issue excess circulation up to 15 p.c. of their combined paid-up capital and rest or reserve funds, this emergency circulation to be taxed at a rate not exceeding 5 p.c. per annum. In 1912, the period was extended to the six months from September to February, inclusive.

At the fourth revision of the Bank Act in 1913 provision was made for an audit of each bank's affairs by auditors appointed by the shareholders. There was also provision for the establishment of Central Gold Reserves in which banks might deposit gold or Dominion notes for the purpose of issuing additional notes of their own there-against. Annual reports to the Minister of the fair market value of real and immovable property held by the banks for their own use were required. Banks were empowered to lend to farmers upon security of their threshed grain. As a war measure the provision for emergency circulation was extended in 1914 to cover the whole year and banks were further authorized to make payments in their own notes instead of in gold or Dominion notes.

The fifth revision of 1923 (13-14 Geo. V, c. 32) resulted in numerous important changes. The qualifications of provisional directors were re-defined, while provision was made for keeping records of attendance at directors' meetings and bringing them to the notice of shareholders. Annual and monthly statements were given further attention and more complete returns required, including statements of controlled companies in the names of which any part of a bank's operations were carried on. Other or special returns were to be made if called for by the Minister. Two auditors were now to be appointed by the shareholders instead of one, and the qualifications, duties, and responsibilities of auditors were more clearly defined. The personal liability of directors in case of distribution of profits in excess of legal limits was also more definitely expressed. Regulations regarding loans were amended and advances to any officer or clerk of a bank could not, in any circumstances, exceed \$10,000. Registration of security for loans under Sec. 88 was provided for. It became necessary for guarantee and pension funds to be invested in trustee securities. The punishment of directors and other bank officials for making false statements of a bank's position was provided for in Sec. 153. In 1924, as a result of the failure of the Home Bank of Canada, provision was made for periodical examination of the chartered banks by an Inspector-General of Banks, who was to be an officer of the Department of Finance.

The sixth revision of the Bank Act was postponed from 1933 to 1934 (c. 24), for adaptation to the establishment of the new Bank of Canada, and most of the alterations outlined the relations of the chartered banks with the Bank of Canada; these are given on pp. 906-907 in the résumé of the legislation under which the Bank of Canada was set up.

Early Development of Central Bank Institutions.—As noted above certain features of a central banking system had become evident before the establishment of the Bank of Canada, and provided more centralized control and flexibility of cash reserves. In chronological order with their origins these are again summarized here:—

1.—*Central Note Issue*, permanently established with the issue of Dominion notes under legislation of 1868.

2.—*The Canadian Bankers' Association*, established in 1900, and designed to effect greater co-operation among the banks in the issue of notes, in credit control, and in various aspects of bank activities.

3.—*The Central Gold Reserves*, established by the Bank Act of 1913.

4.—*Re-discount Facilities*, although originated as a war measure by the Finance Act of 1914, were made a permanent feature of the system by the Finance Act of 1923, which empowered the Minister of Finance to issue Dominion notes to the banks on the deposit by them of approved securities. This legislation provided the banks with a means of increasing their legal tender cash reserves at will.

Section 2.—The Bank of Canada.

Subsection 1.—The Bank of Canada Act and its Amendment.

C. 43 of the Statutes of 1934, "An Act to incorporate the Bank of Canada", provided for the establishment of a central bank in Canada. The capital of the Bank was originally \$5,000,000, divided into shares of \$50 par value. These shares were offered for public subscription by the Minister of Finance on Sept. 17, 1934, and were largely oversubscribed. The maximum allotment to any one individual or corporation was 15 shares. Shares of the Bank may be held only by British subjects ordinarily resident in Canada, or by corporations controlled by British subjects ordinarily resident in Canada. The maximum holding permitted one person is 50 shares. Directors, officers or employees of the chartered banks may not hold shares of the Bank. The Bank commenced business on Mar. 11, 1935.

By an amendment to the Act passed at the 1936 session of Parliament, the capitalization of the Bank was increased to \$10,100,000 by the sale of \$5,100,000 Class "B" shares to the Minister of Finance. The original shareholders are now designated Class "A".*

The Bank is authorized to pay cumulative dividends of $4\frac{1}{2}$ p.c. per annum from its profits after making such provision as the Board thinks proper for bad and doubtful debts, depreciation in assets, pension funds, and all such matters as are properly provided for by banks. The remainder of the profits will be paid into the Consolidated Revenue Fund of Canada and to the Rest Fund of the Bank in specified proportions until the Rest Fund is equal to the paid-up capital, when all the remaining profits will be paid into the Consolidated Revenue Fund.

The Bank may buy and sell securities of the Dominion, the provinces, the United Kingdom, and the United States of America, without restriction if of a maturity not exceeding two years, and in limited amounts if of longer maturity. It may also buy and sell securities of British Dominions and France without restriction, if maturing within six months. Short-term securities of the Dominion or provinces may be re-discounted. The Bank may buy and sell certain classes of commercial paper of limited currency, and if endorsed by a chartered bank may re-discount such commercial paper. Advances for six-month periods may be made to chartered banks, Quebec Savings Banks, the Dominion or any province against certain classes of collateral, and advances of specified duration may be made to the Dominion or any province in amounts not exceeding a fixed proportion of such government's revenue. The Bank may buy and sell gold, silver, nickel, and bronze coin and gold and silver bullion, and may deal in foreign exchange.

The provisions regarding the note issue of the Bank of Canada are dealt with on pp. 912-913.

* At the time of going to press it is announced that legislation will be brought before the House of Commons before the end of the present (1938) session for the purchase of all outstanding Class "A" stock by the Dominion Government with the object of bringing the Bank of Canada under complete government ownership.

The Bank of Canada must maintain a reserve of gold equal to not less than 25 p.c. of its total note and deposit liabilities in Canada. The reserve, in addition to gold, may include silver bullion, balances in pounds sterling in the Bank of England, in United States dollars in the Federal Reserve Bank of New York, and in gold currencies in central banks in gold standard countries or in the Bank for International Settlements, treasury bills of the United Kingdom or the United States of America having a maturity not exceeding three months, and bills of exchange having a maturity not exceeding 90 days, payable in London, New York, or in a gold standard country, less any liabilities of the Bank payable in the currency of the United Kingdom, the United States of America, or a gold standard country.

The chartered banks are required to maintain a reserve of not less than 5 p.c. of their deposit liabilities within Canada in the form of deposits with and notes of the Bank of Canada.

The Bank acts as the fiscal agent of the Dominion of Canada and may, by agreement, act as banker or fiscal agent of any province. The Bank may not accept deposits from individuals and does not compete with the chartered banks in commercial banking fields.

The head office of the Bank is at Ottawa, and it has an agency in each province, namely, at Charlottetown, Halifax, Saint John, Montreal, Toronto, Winnipeg, Regina, Calgary, and Vancouver.

The Governor of the Bank is its chief executive officer and Chairman of the Board of Directors, and he is assisted by a Deputy Governor and an Assistant Deputy Governor. The first appointments were made by the Government. Subsequent appointments are to be made by the Board of Directors subject to the approval of the Governor in Council.

At the first meeting of the shareholders on Jan. 23, 1935, seven directors were elected for terms to run as follows: one until the third annual general meeting (1938), two until the fourth (1939), two until the fifth (1940), and two until the sixth annual general meeting (1941).

By the 1936 amendment the number of directors elected by the Class "A" shareholders will be eventually reduced to three who will hold office for three-year terms. The six directors appointed by the Class "B" shareholder with the approval of the Governor in Council, were announced on Sept. 11, 1936. These directors are appointed for terms to run as follows: two until the annual general meeting in 1940, two until 1941, and two until 1942. Thereafter, the Government directors, each of whom shall hold office for a term of three years, will be appointed by the Class "B" shareholder with the approval of the Governor in Council, two as of the day of the annual general meeting in 1940 and two at the day of each annual general meeting thereafter. In the transaction of the business of the Bank each director has one vote except that prior to the annual general meeting in 1940 each of the directors appointed by the Class "B" shareholder shall be entitled to two votes.

There is also an Executive Committee of the Board of Directors consisting of the Governor, Deputy Governor, and one member of the Board, which must meet once a week. This Committee has the same powers as the Board but every decision is submitted to the Board of Directors at its next meeting. The Board must meet at least four times a year. The Deputy Minister of Finance is an *ex officio* member of the Board of Directors and of the Executive Committee, but is without a vote.

The Governor, or in his absence the Deputy Governor, only has the power to veto any action or decision of the Board of Directors of the Executive Committee, subject to confirmation or disallowance by the Governor in Council.

Subsection 2.—The Bank of Canada and Its Relationship to the Canadian Financial System.

An article under this title appeared at pp. 881-885 of the 1937 edition of the Year Book. It dealt with such subjects as the functions of the Bank, its control and regulation of credit and currency, the mechanism by which such control is exercised, the expansion and contraction of credit, the mitigation of general economic fluctuations, the control of exchange operations, the advisory function of the Bank, and its duties as the Government's banker.

Subsection 3.—Bank of Canada Operations.

The operations of the Bank of Canada, as shown by the liabilities and assets statement as at Mar. 13, 1935, and Dec. 31, 1935-37, are shown in Table 1.

1.—Liabilities and Assets of the Bank of Canada, Mar. 13, 1935, and Dec. 31, 1935-37.

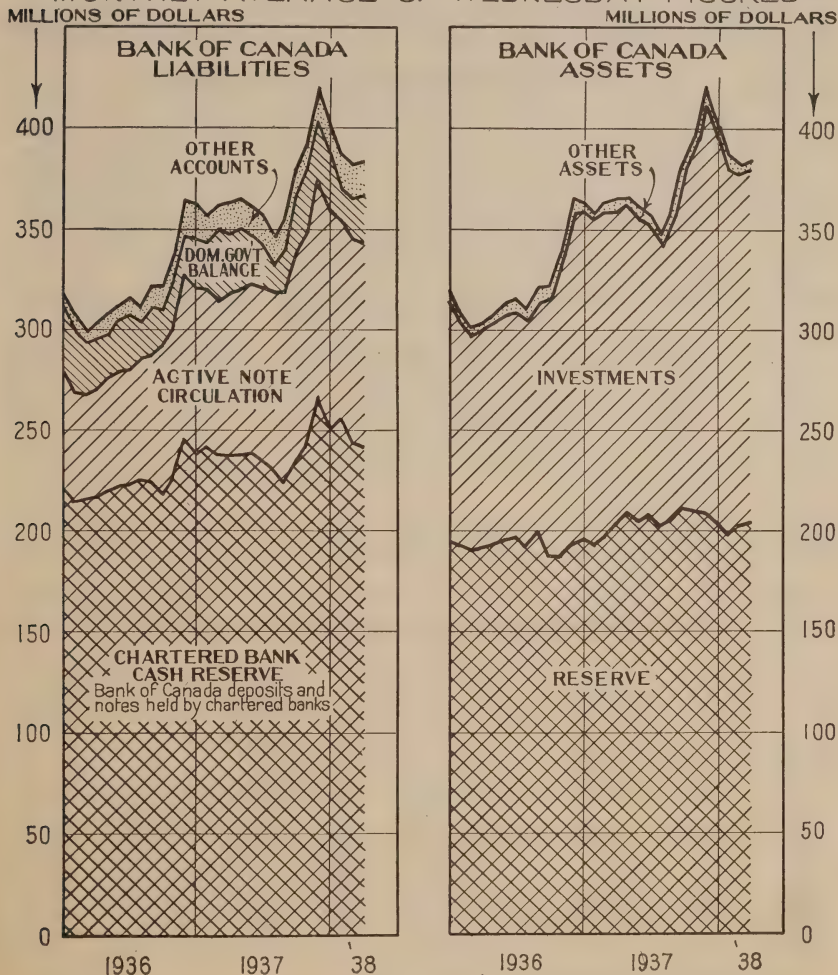
Item.	Mar. 13, 1935. \$	Dec. 31, 1935. ¹ \$	Dec. 31, 1936. ¹ \$	Dec. 31, 1937. ¹ \$
LIABILITIES.				
Capital paid up.....	4,991,640	5,000,000	10,100,000	10,100,000
Reserve fund.....	Nil	173,092	743,716	1,348,414
Notes in circulation.....	97,805,665	99,677,229	135,735,458	165,330,405
Deposits—				
Dominion Government.....	4,212,200	18,262,844	19,917,329	12,292,332
Chartered banks.....	151,927,628	181,636,034	186,973,785	196,039,737
Other.....	277,922	766,255	2,059,627	3,456,935
Totals, Deposits.....	156,417,750	200,665,133	208,950,741	211,789,054
Dividends declared.....	Nil	113,000	182,793	228,260
Other liabilities.....	99,702	2,026,698	1,273,197	1,634,083
Totals, Liabilities.....	259,314,757	307,655,152	356,985,905	390,430,216
ASSETS.				
Reserves (at Market Values)—				
Gold coin and bullion.....	106,584,356	180,509,343	179,376,816	179,763,762
Silver bullion.....	986,363	1,638,366	2,257,032	2,992,623
Sterling and U.S.A. dollars.....	394,875	4,223,101	9,125,401	14,884,810
Other currencies, of countries on a gold standard.....	Nil	9,215	Nil	382
Totals, Reserves.....	107,965,594	186,380,025	190,759,248	197,641,578
Subsidiary coin.....	297,335	128,778	143,116	42,989
Advances to Dominion Government.....	Nil	3,465,813	Nil	Nil
Investments (at Not Exceeding Market Values)—				
Dominion and Provincial Government short-term securities.....	34,846,294	30,873,169	61,299,024	82,343,729
Other Dominion and Provincial Government securities.....	115,013,637	83,409,675	99,016,300	91,564,710
Other securities.....	Nil	Nil	Nil	12,212,437
Totals, Investments.....	149,859,931	114,282,844	160,315,414	186,120,876
Bank premises.....	Nil	111,911	350,719	1,167,563
All other assets.....	1,191,897	3,285,780	5,417,408	5,457,210
Totals, Assets.....	259,314,757	307,655,152	356,985,905	390,430,216

¹ From the Bank's Annual Statement.

The chart given below showing Bank of Canada liabilities and assets covers the short period since the Bank was established, but illustrates the relationship between the central bank's balance sheet and chartered bank cash reserves. The expansion of Bank of Canada liabilities and assets has provided for increased Bank of Canada notes in active circulation as the chartered bank-note issue is limited and gradually retired under Bank Act regulations, and somewhat enlarged the cash reserves of the chartered banks. The principal changes in Bank of Canada assets have been those due to revaluation of gold holdings required by the Exchange Fund Act of July, 1935, and the rise in investments, variations in which have been due in part to seasonal variations in cash reserves and active note circulation.

BANK OF CANADA SOURCES AND DISTRIBUTION OF CASH

MONTHLY AVERAGE OF WEDNESDAY FIGURES



Reproduced from the Bank of Canada's "Statistical Summary", April, 1938.

Section 3.—Currency.

Subsection 1.—Canadian Coinage.

The present standard of Canada is gold of 900 millesimal fineness (23·22 grains equal to one dollar). As pointed out on p. 903 gold coin has been authorized but only very limited issues were ever made. The British sovereign and half sovereign, and United States eagle, half eagle, and double eagle are legal tender. Subsidiary coin consists of 50, 25 and 10 cent silver pieces,* 800 fine (reduced from 925 fine in 1920). Such subsidiary silver coin is legal tender to the amount of ten dollars. The 5-cent piece (now made of nickel) is legal tender up to five dollars and the 1-cent bronze coin up to twenty-five cents. There is no provision for the redemption of subsidiary coin. Table 2 gives statistics of Canadian coinage, and Table 3 shows the coins in circulation at the end of each year from 1926 to 1937.

*The Currency Act of 1910 made provision for a silver dollar and a 5-cent silver coin. The former was not coined until 1935, when a limited issue was made as a jubilee coin. The 5-cent silver coin was coined freely until 1921. It still has limited legal tender but has been replaced in the coinage by the 5-cent nickel piece.

2.—Particulars of Canadian Coinages Current in 1938.

Coinage.	Thick- ness of Blank.	Diameter of Coin.		Fineness.	Legal Weight.			Legal Remedy—			Amount for which Legal Tender.
								Of Weight.	Of Fine- ness.		
	in.	in.	mm.	1,000 ths.	grns.	oz.	grams.	grns.	grams.	1,000ths.	\$
Gold—											
\$10.....	·068	1·060	26·92	900	258	·5375	16·72	·4	·026	1	} any amount.
\$ 5.....	·053	·850	21·59	900	129	·26875	8·36	·25	·016	1	
Silver—											
\$ 1.....	·09375	1·40	35·56	800	360	·75	23·33	1·50	·097	6	10·00
50c.....	·064	1·170	29·72	800	180	·375	11·66	1·50	·097	6	10·00
25c.....	·051	·930	23·62	800	90	·1875	5·83	1·00	·065	6	10·00
10c.....	·035	·705	17·91	800	36	·075	2·33	per 10 pieces. 3·00 ·194		6	10·00
Nickel—											
5c.....	{ ·055 to ·057	·835	21·21	1,000	70	lb. av. ·01	4·54	per lb. of 100 pieces. 100·00 6·480		15	5·00
Bronze—											
1c.....	·0495	·750	19·05	{ Cu. 955. Sn. 30. Zn. 15. }		50	·007	3·24	140·00 9·072	—	0·25

3.—Circulation of Canadian Coin at Dec. 31, 1926-37.

NOTE.—Net issues of coin since 1858.

Date.	Silver.	Nickel. ¹	Bronze.	Total.	Per Capita.
	\$	\$	\$	\$	\$
Dec. 31—					
1926.....	27,433,463	564,865	2,043,833	30,042,161	3·18
1927.....	27,104,534	813,784	2,080,196	29,998,514	3·11
1928.....	27,737,963	1,063,627	2,171,657	30,973,247	3·15
1929.....	28,638,195	1,330,498	2,290,789	32,259,482	3·22
1930.....	28,562,330	1,494,525	2,297,405	32,354,260	3·17
1931.....	28,706,348	1,775,139	2,346,054	32,827,541	3·16
1932.....	28,853,740	1,939,923	2,558,962	33,352,625	3·17
1933.....	28,530,340	2,064,054	2,678,302	33,272,696	3·12
1934.....	28,702,640	2,256,268	2,745,296	33,704,204	3·11
1935.....	28,407,168	2,449,278	2,818,341	33,674,787	3·08
1936.....	28,442,074	2,650,891	2,904,288	33,997,253	3·08
1937.....	29,387,857	2,899,361	3,003,286	35,290,504	3·17

¹ Nickel coins were first issued in 1922.

The Royal Canadian Mint.—The Ottawa Mint, established as a branch of the Royal Mint under the (Imperial) Coinage Act, 1870, and opened on Jan. 2, 1908, was by 21-22 Geo. V, c. 48, constituted a branch of the Department of Finance, and by the Proclamation of Nov. 14, 1931, issued under Sec. 3 of that Act, it has since Dec. 1, 1931, operated as the Royal Canadian Mint. At first the British North American provinces, and later the Dominion of Canada, obtained their coins from the Royal Mint in London or from The Mint, Birmingham, Ltd., and in its earlier years the operations of the Mint in Canada were confined to the production of gold, silver, and bronze coins for domestic circulation, of British sovereigns, and of small coins struck under contract for Newfoundland and Jamaica. Previous to 1914 small quantities of gold bullion were refined, but during the War the Mint came to the assistance of the British Government by establishing a refinery in which nearly twenty million ounces of South African gold were treated on account of the Bank of England, and the subsequent great development of the gold-mining industry in Canada has resulted in gold-refining becoming one of the principal activities of the Mint. Gold coins have not been struck since 1919, most of the fine gold produced from the rough shipments from the mines being delivered to the Department of Finance or, since Mar. 11, 1935, to the Bank of Canada in the form of bars of approximately 400 fine oz. each, the rest being sold in a convenient form to manufacturers. The fine silver extracted from the rough gold, when not required for coinage, is sold in New York or disposed of to local manufacturing firms.

4.—Annual Receipts of Gold Bullion at the Ottawa Mint, and Bullion and Coinage Issued, calendar years 1926-37.

Calendar Year.	Gold Received.	Gold Coin and Bullion Issued.	Silver Coin Issued.	Nickel Coin Issued.	Bronze Coin Issued.
	fine oz.	fine oz.	\$	\$	\$
1926.....	1,375,502	1,347,668	50,000	168,500	28,200
1927.....	1,448,180	1,451,907	574,000	249,000	37,500
1928.....	1,325,113	1,305,200	867,000	250,000	92,100
1929.....	438,351	468,384	1,081,000	267,000	123,300
1930.....	862,075	722,469	326,000	164,500	13,400
1931.....	1,721,237	1,735,112	475,400	281,000	51,400
1932.....	2,829,529	2,873,221	287,000	165,000	213,200
1933.....	2,568,838	2,589,649	155,000	125,000	120,800
1934.....	3,008,977	3,038,019	172,300	193,000	69,900
1935.....	3,158,780	3,177,401	601,020	194,000	75,100
1936.....	3,603,335	3,625,549	809,200	202,600	87,200
1937.....	3,933,453	3,937,910	1,322,200	251,100	105,400

Subsection 2.—Dominion and Bank of Canada Notes.

Dominion Notes.—It has been explained in the historical outline at the beginning of this chapter that Dominion notes became established in 1868. The legislation by which the issue was expanded with the growth of the country was given in a footnote on p. 952 of the 1934-35 Year Book.

Prior to the taking over of the note issue by the Bank of Canada when it opened on Mar. 11, 1935, Dominion notes were issued under any one of three statutory authorities: (1) the Dominion Notes Act (Statutes of 1934, c. 34), which required a gold reserve of 25 p.c. to be held against the first \$120,000,000 of notes issued and full gold coverage against any issue in excess of \$120,000,000; (2) the Finance Act (R.S.C. 1927, c. 70), Part II of which authorized the Minister of Finance to advance to any chartered bank or to the savings banks of Quebec, Dominion notes to any amount on the pledge of approved securities deposited with the Minister. These advances bore interest and no gold coverage was required to be held on Dominion notes so advanced; (3) C. 4 of the Statutes of 1915, authorizing the Government to issue Dominion notes to the amount of \$26,000,000 without gold coverage, but partly covered by the deposit of \$16,000,000 of railway securities guaranteed by the Dominion Government.

The Dominion note issue was therefore partly gold-backed and partly fiduciary. Dominion notes were legal tender and, in normal times when Canada was on the gold standard, they were redeemable in gold.

Dominion notes were of two types, those for the purpose of general circulation, and 'special' notes. The latter were used only by the banks for inter-bank transactions and clearings, or for cash reserves or deposit in the Central Gold Reserves. They were mainly of \$5,000 and \$50,000 denominations. Dominion notes for the purpose of general circulation were of the denominations of 25 cents, \$1, \$2, \$4, \$5, \$50, \$500 and \$1,000, although for a considerable time no \$4 or \$50 notes had been issued. Since the minimum denomination for chartered bank notes was set at \$5, Dominion notes of lower denominations naturally were largely in circulation among the general public, but there was nothing to prevent any of these Dominion notes from being included in the reserves of the banks, and it was provided that at least 40 p.c. of the banks' reserves were to consist of Dominion notes.

Bank of Canada Notes.—The Bank of Canada, when it commenced operations, assumed the liability for Dominion notes outstanding, which were replaced in public circulation, and partly replaced as cash reserves, by its own legal-tender notes in denominations of \$1, \$2, \$5, \$10, \$20, \$50, \$100 and \$1,000. Deposits of chartered banks at the Bank of Canada completed the replacement of Dominion notes as cash reserves.

The chartered banks are required under the Bank Act of 1934 to reduce the issue of their own bank notes gradually during the ten years 1935-45 to an amount not in excess of 25 p.c. of their paid-up capital on Mar. 11, 1935. Bank of Canada notes are thus replacing chartered bank notes as the issue of the latter is reduced.

In Table 5 are shown the denominations of Dominion or Bank of Canada notes in circulation in 1926, 1929, 1932, and in the three latest years. In the denominations under \$5, which have, for many years, been used for general circulation, there has been little change. In the denominations from \$5 to \$1,000, where Bank of Canada notes have partially replaced chartered bank notes or Dominion notes, there has been a large increase. On the other hand, the special Dominion notes in denominations from \$1,000 to \$50,000 which were used almost exclusively for inter-bank transactions or bank reserves, are no longer in use.

5.—Denominations of Dominion or Bank of Canada Notes in Circulation, 1926, 1929, 1932, and 1935-37.

NOTE.—Annual averages of month-end figures.

Denomination.	1926.	1929.	1932.	1935.	1936.	1937.
	\$	\$	\$	\$	\$	\$
Provincial.....	27,624	27,621	27,594	27,584	27,583	27,581
Fractional.....	1,330,663	1,380,710	1,287,544	1,253,376	1,173,630	1,142,455
\$ 1.....	17,732,100	20,032,308	18,957,935	21,073,894	21,896,929	23,048,042
2.....	12,925,212	14,609,088	13,346,323	14,457,105	14,994,532	15,662,722
4.....	33,397	32,138	31,004	29,861	29,608	29,444
Totals....	32,048,996	36,081,865	33,650,400	36,841,820	38,122,282	39,910,244
\$ 5.....	626,179	730,101	5,137,627	11,718,950	14,264,286	21,415,392
10.....	Nil	Nil	Nil	11,074,430	23,517,545	37,914,727
20.....	Nil	Nil	Nil	3,503,082	7,962,389	15,328,494
25.....	Nil	Nil	Nil	115,810	93,839	73,433
50.....	650	650	650	1,094,821	2,801,183	4,588,100
100.....	Nil	Nil	Nil	1,443,950	3,671,616	5,813,192
500.....	1,875,917	1,811,875	2,530,833	21,073,894	2,416,917	1,981,542
1,000.....	3,799,250	4,168,917	6,437,583	11,585,083	12,414,166	14,017,333
Totals....	6,301,996	6,711,543	14,106,693	61,610,020	67,141,941	101,132,213
Specials—						
\$ 1,000.....	671,333	407,667	3,500	1,000	1,000	1,000
5,000.....	16,307,500	7,209,583	8,063,750	2,065,833	10,000	10,000
50,000.....	134,675,000	153,970,834	110,054,167	26,816,667	Nil	Nil
Totals, Specials.	151,653,833	161,588,084	118,121,417	28,883,500	11,000	11,000
Grand Totals..	190,004,825	204,381,492	165,878,510	127,335,340	105,275,223	141,053,457

Subsection 3.—Chartered Bank Notes.

By reference to the historical outline at the beginning of this chapter, the developments may be traced by which bank notes became the chief circulating medium in Canada in the period preceding the establishment of the Bank of Canada. The main steps of this development which remained as permanent features of the system are assembled and emphasized here. By the Bank Act of 1870 (later consolidated with the general Bank Act of 1871), the note issue of a bank was not to exceed its paid-up capital, no bank notes were to be issued under \$4 in value (later changed to \$5 and multiples thereof), and, while the banks were allowed to use their own discretion regarding the amount of their cash reserves, it was stipulated that at least one-third (later increased to 40 p.c.) of such cash reserves as they chose to carry should consist of Dominion notes. In the revision of 1880, a note-holder was definitely recognized as a preferred creditor. The Bank Act of 1890 provided for the Bank Note Circulation Redemption Fund, made up by each bank depositing with the Minister of Finance an amount equal to 5 p.c. of its note circulation. As a result of the operation of this fund and of making notes a prior lien against the assets of failed banks, no bank-note holder in Canada has suffered a loss since 1881. In 1908, after the financial crisis of 1907, provision was made for the banks to issue, during the crop-moving season, October to January, inclusive (later extended to September to February, inclusive), an excess circulation up to 15 p.c. of their combined capital and 'rest' or reserve funds, such excess to be taxed at a rate not exceeding 5 p.c. per annum. The revision of the Bank Act in 1913 provided for the establishment of Central Gold Reserves in which banks might deposit gold or Dominion notes and

issue additional notes of their own there-against. The Finance Act (c. 3) of 1914, gave the Minister of Finance authority to issue Dominion notes to the banks against approved securities deposited with him. Originally passed as a war measure, this was made a permanent feature of the system by the Finance Act (c. 48) of 1923, and provided the banks with the means of further expanding their note issue by the deposit of the Dominion notes, so obtained, in the Central Gold Reserves.

Bank notes, although forming the chief circulating medium in the hands of the public, were a fiduciary issue; they were not legal tender but were convertible into Dominion notes which were legal tender.

The provisions regarding bank notes were materially changed with the establishment of the Bank of Canada under the Bank Act (c. 24) of 1934. The authority both for seasonal expansion and for additional issue secured by deposit in the Central Gold Reserves was then terminated. Provision was made for a gradual reduction in bank-note circulation over a period of years as explained on p. 912. As a result of these changes, current data on bank-note circulation are not comparable with those of earlier years. However, statistics of total notes in the hands of the general public are comparable. This public circulation includes chartered bank notes together with Dominion notes and Bank of Canada notes, exclusive of those held by the banks as reserves. Statistics on this basis are shown in Table 6.

6.—Note Circulation in the Hands of the Public, 1926-37.

Year.	Averages of Month-End Figures.			Averages of Daily Figures of Total.	
	Chartered Bank. ¹	Dominion or Bank of Canada. ²	Total.	Amount. ³	Per Capita. ⁴
	\$	\$	\$	\$'000,000	\$
1926.....	168,885,995	26,314,706	195,200,701	195	20.63
1927.....	172,100,763	27,793,500	199,894,263	198	20.55
1928.....	176,716,979	28,893,340	205,620,319	204	20.74
1929.....	178,291,030	30,003,870	208,294,900	205	20.44
1930.....	159,341,035	28,812,059	188,153,144	185	18.12
1931.....	141,969,350	28,572,011	170,541,361	167	16.09
1932.....	132,165,942	28,483,686	160,649,628	158	15.04
1933.....	130,362,488	29,066,051	159,428,539	157	14.70
1934.....	135,537,793	30,547,720	166,085,513	163	15.06
1935.....	125,644,102	47,288,651	172,932,753	169	15.45
1936.....	119,507,306	66,934,958	186,442,264	182	16.50
1937.....	110,259,134	94,876,384	205,135,518	200	17.99

¹ Gross note circulation of chartered banks.

and notes deposited in the Central Gold Reserves up to March, 1935.

figures supplied by the Bank of Canada.

p. 155.

² Total issue less notes held by chartered banks

³ Annual averages of daily

⁴ Figures based on estimates of population as given on

Section 4.—Monetary Reserves.

Subsection 1.—Bank of Canada Reserves.

In the 1936 edition of the Year Book, the composition of Canadian Gold Reserves held by the Government was presented for the years 1905 to 1934, in Table 3. p. 895. Since March, 1935, the gold reserves have been held by the Bank of Canada. By authority of the Exchange Fund Act (c. 60, 1935), effective in July, 1935, they are to be valued at the prevailing current market price of gold. The effect of the revaluation as from the above date is shown in the chart on p. 909. The new data are now to be found under the item "Reserves" on the "Assets" side of Table 1, p. 908.

Subsection 2.—Chartered Bank Canadian Cash Reserves.

Before the Establishment of the Bank of Canada.—Up to March, 1935, legal tender cash reserves in Canada were made up partly of Dominion notes (see

pp. 911-912) and partly of gold coin and bullion, and subsidiary coin, including these forms of cash held by the banks themselves and as deposits in the Central Gold Reserves. In so far as these reserves were in actual gold or were in Dominion notes backed by gold, they were subject to the expanding or contracting influences of monetary gold imports or exports arising from Canada's balance of international payments, so long as Canada was on the gold standard.

Since the Establishment of the Bank of Canada.—When the Bank of Canada was established, the chartered banks turned over their reserves of gold in Canada and Dominion notes to the new bank in exchange for deposits with and notes of the Bank of Canada. It was provided that henceforth the chartered banks were to carry reserves in these forms amounting to at least 5 p.c. of their deposit liabilities in Canada. Since that time, therefore, the gold reserves against currency and bank credit have been in the custody of the central bank.

The cash reserves shown in Table 7, include, prior to Mar. 11, 1935, the gold and coin and Dominion notes held by the banks in Canada and the deposits in the Central Gold Reserves not ear-marked against the issue of bank notes, and, since the above date, notes of and deposits with the Bank of Canada.

7.—Cash Reserve of the Chartered Banks in Canada, 1926-37.

NOTE.—Figures supplied by the Bank of Canada. For detailed figures after 1935, see Table 10, item 1.

Year.	Annual Average of Daily Figures.	Annual Average of Month-End Figures.	Year.	Annual Average of Daily Figures.	Annual Average of Month-End Figures.
	\$'000,000	\$'000,000		\$'000,000	\$'000,000
1926.....	192	197	1933.....	189	195
1927.....	187	194	1934.....	201	203
1928.....	193	205			
1929.....	191	212	1935 ¹	213	216
1930.....	176	197	1936.....	225	225
1931.....	169	182	1937.....	240	240
1932.....	172	186			

¹ See text immediately preceding this table.

Section 5.—Commercial Banking.

Subsection 1.—Historical.

Since one of the chief functions of the early banks in Canada was to issue notes to provide a convenient currency or circulating medium, it has been expedient to cover both currency and banking in the one historical sketch which will be found on pp. 900-906. However, the function of note issue is no longer as important as it was. Latterly, the services of the chartered banks in gathering deposits from innumerable sources have emphasized the importance of deposit banking by which the savings of the people are put to immediate productive and commercial use; with the development of commercial banking, other necessary commercial banking facilities have been given more importance. Included among these is the mechanism of bills of exchange by which foreign trade is financed. The principal features of this development of commercial banking facilities in the evolution of the Canadian banking system may be summarized as follows: (1) its origin, closely related to the Montreal produce and export trade, and to the commerce of Halifax and Saint John; (2) the development of the branch bank system in order to meet the demands of a rapidly moving frontier of settlement; (3) the adaptation to the requirements of the grain and cattle trade of the west; and (4) the consolidation during later years of the

features which tended towards its early success. The development of a stable system has been accompanied by failures, particularly marked about the middle of the 19th century, but progress has nevertheless been steady, based on sound principles, and adapted as closely as could be to the particular needs of the country.

The branch bank is perhaps the most distinctive feature of the Canadian system as it exists to-day, and for a country such as Canada, vast in area and with a small population, the plan has proved a good one. A result of the growth of branch banks was the development of a partially centralized system—centralized as to banks, of which there are now ten, rather than as to districts as in the partially centralized system of the United States. There were 28 chartered banks in existence at Confederation. The elimination of weaker banks or their amalgamation with more stable institutions has been a progressive move towards greater security and confidence. The banks at Confederation were as follows:—

ONTARIO AND QUEBEC.
Bank of Montreal.
Quebec Bank.
Commercial Bank of Canada.
City Bank.
Gore Bank.
Bank of British North America.
Banque du Peuple.
Niagara District Bank.
Molson's Bank.
Bank of Toronto.
Ontario Bank.
Eastern Townships Bank.
Banque Nationale.
Banque Jacques-Cartier.
Merchants' Bank of Canada.

Royal Canadian Bank.
Union Bank of Lower Canada.
Mechanics' Bank.
Canadian Bank of Commerce.

NOVA SCOTIA.
Bank of Yarmouth.
Merchants' Bank of Halifax.
People's Bank of Halifax.
Union Bank of Halifax.
Bank of Nova Scotia.

NEW BRUNSWICK.
Bank of New Brunswick.
Commercial Bank of New Brunswick.
St. Stephen's Bank.
People's Bank of New Brunswick.

Table 8 shows the amalgamations since 1867, while a table at pp. 894-895 of the 1937 Year Book showed the insolvencies since Confederation; there have been no further changes reported and, therefore, the table is not reprinted here.

8.—Bank Absorptions in Canada since 1867.

NOTE.—The purchasing banks named in the latter part of the table on p. 917 are no longer in business.

Purchasing Bank.	Bank Absorbed.	Date. ¹
Bank of Montreal.....	Exchange Bank, Yarmouth, N.S.....	Aug. 13, 1903
	People's Bank of Halifax, N.S.....	June 27, 1905
	Ontario Bank.....	Oct. 13, 1906
	People's Bank of New Brunswick.....	Apr. 15, 1907
	Bank of British North America.....	Oct. 12, 1918
	Merchants' Bank of Canada.....	Mar. 20, 1922
	Molson's Bank.....	Jan. 20, 1925
Canadian Bank of Commerce.....	Gore Bank.....	May 19, 1870
	Bank of British Columbia.....	Dec. 31, 1900
	Halifax Banking Company.....	May 30, 1903
	Merchants' Bank of P.E.I.....	May 31, 1906
	Eastern Townships' Bank.....	Feb. 29, 1912
	Bank of Hamilton.....	Dec. 31, 1923
	Standard Bank of Canada.....	Nov. 3, 1928
Bank of Nova Scotia.....	Union Bank of P.E.I.....	Oct. 1, 1883
	Bank of New Brunswick.....	Feb. 15, 1913
	The Metropolitan Bank.....	Nov. 14, 1914
	The Bank of Ottawa.....	Apr. 30, 1919
Royal Bank of Canada.....	Union Bank of Halifax.....	Nov. 1, 1910
	Traders' Bank of Canada.....	Sept. 3, 1912
	Quebec Bank.....	Jan. 2, 1917
	Northern Crown Bank.....	July 2, 1918
	Union Bank of Canada.....	Aug. 31, 1925
Imperial Bank of Canada.....	Niagara District Bank.....	June 21, 1875
	The Weyburn Security Bank.....	May 1, 1931
Banque d'Hochelega ²	Banque Nationale.....	Apr. 30, 1924

¹ Dates given since 1900 are those of the Orders in Council authorizing the absorptions.

² The Banque d'Hochelega after absorbing the Banque Nationale adopted the name Banque Canadienne Nationale.

8.—Bank Absorptions in Canada since 1867—concluded.

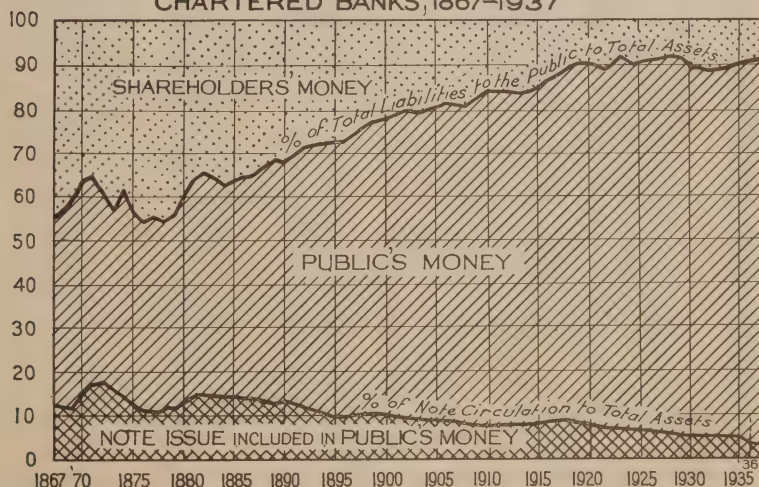
Purchasing Bank.	Bank Absorbed.	Date. ¹
Bank of New Brunswick.....	Summerside Bank.....	Sept. 12, 1901
Merchants' Bank of Canada.....	Merchants' Bank.....	Feb. 22, 1868
	Commercial Bank of Canada.....	June 1, 1868
Union Bank of Halifax.....	Commercial Bank of Windsor.....	Oct. 31, 1902
Northern Crown Bank.....	The Northern Bank.....	July 2, 1908
	Crown Bank of Canada.....	July 2, 1908
Union Bank of Canada.....	United Empire Bank.....	Mar. 31, 1911
Home Bank of Canada.....	La Banque Internationale du Canada.....	Apr. 15, 1913
Standard Bank of Canada.....	Western Bank of Canada.....	Feb. 13, 1909
	Sterling Bank of Canada.....	Dec. 31, 1924

¹ Dates given since 1900 are those of the Orders in Council authorizing the absorptions.

Subsection 2.—Combined Statistics of Chartered Banks.

In Table 9 are given summary statistics of Canadian banking business since Confederation. In order to afford a clear view of the nature of banking transactions in Canada, bank liabilities have been classified in two main groups: liabilities to shareholders and liabilities to the public. Only the latter group is ordinarily considered when determining the financial position of any such institution. Assets are divided into four groups, 'other assets' being included in the total. As of interest to students of banking practice, the relative rates of increase of capital and reserve funds may be noted, also the great increase in the proportion of liabilities to the public to total liabilities, and the gradually increasing percentage of liabilities to the public to total assets. The accompanying chart of ownership division of total assets is of interest in this connection. The declining proportion of notes in circulation to total liabilities to the public is also characteristic of the evolution of banking in recent times. Holdings of Dominion and Provincial Government and municipal securities were relatively insignificant prior to the Great War.

PERCENTAGE DISTRIBUTION OF THE TOTAL ASSETS
OF THE
CHARTERED BANKS, 1867-1937



9.—Historical Summary showing Development of the Canadian

NOTE.—These statistics are yearly averages computed from the twelve monthly returns. Dashes

LIABILITIES.

Cal- endar Year.	Liabilities to Shareholders.		Liabilities to the Public.				
	Capital.	Rest or Reserve Fund.	Notes in Circulation.	Demand Deposits in Canada.	Notice Deposits in Canada.	Total on Deposit. ¹	Total Public Liabilities. ²
	\$	\$	\$	\$	\$	\$	\$
1867 ³	30,926,470	-	9,346,081	-	-	31,375,316	43,273,969
1868.....	30,507,447	-	9,350,646	-	-	33,653,594	45,144,854
1869.....	30,782,637	-	9,539,511	-	-	40,028,090	50,940,226
1870.....	33,031,249	-	15,149,031	-	-	48,763,205	65,685,870
1871.....	37,095,340	-	20,914,637	-	-	56,287,391	80,250,974
1872.....	45,190,085	-	25,296,454	-	-	61,481,452	90,864,688
1873.....	54,690,561	-	27,165,878	-	-	65,426,042	98,982,668
1874.....	60,388,340	-	27,904,963	-	-	77,113,754	116,412,392
1875.....	64,619,513	-	23,035,039	-	-	74,642,446	104,609,356
1876.....	66,804,398	-	21,245,935	-	-	72,852,686	99,614,014
1877.....	65,206,009	-	20,704,338	-	-	74,166,287	99,810,731
1878.....	63,682,863	-	20,475,586	-	-	70,856,253	95,538,831
1879.....	62,737,276	-	19,486,103	-	-	73,151,425	96,760,113
1880.....	60,052,117	-	22,529,623	-	-	85,303,814	111,838,941
1881.....	59,534,977	-	28,516,692	-	-	94,346,481	127,176,249
1882.....	59,799,644	-	33,582,080	-	-	110,133,124	149,777,214
1883.....	61,390,118	-	33,283,302	-	-	107,648,383	145,938,095
1884.....	61,579,021	18,149,193 ⁴	30,449,410	-	-	102,398,228	137,493,917
1885.....	61,711,566	17,879,716	30,720,762	-	-	104,014,660	138,762,695
1886.....	61,662,093	17,817,693	31,030,499	-	-	111,449,365	146,954,260
1887.....	60,860,561	17,873,552	32,478,118	-	-	112,656,985	149,704,402
1888.....	60,345,035	18,529,911	32,205,259	-	-	125,136,473	163,990,797
1889.....	60,229,752	19,766,426	32,207,144	-	-	134,650,732	173,029,602
1890.....	59,974,902	21,127,838	32,834,511	-	-	135,548,704	173,207,587
1891.....	60,700,697	22,821,501	33,061,042	-	-	148,396,968	187,332,325
1892.....	61,626,311	24,511,709	33,788,679	-	-	160,668,471	208,062,169
1893.....	62,009,346	25,837,753	33,811,925	-	-	174,776,722	217,195,975
1894.....	62,063,371	27,041,235	31,166,003	-	-	181,743,890	221,066,724
1895.....	61,800,700	27,273,500	30,807,041	-	-	190,916,939	229,794,322
1896.....	62,043,173	26,526,632	31,456,297	-	-	193,616,049	232,338,086
1897.....	62,027,703	27,087,782	34,350,118	-	-	211,788,096	252,660,708
1898.....	62,571,920	27,627,520	37,873,934	-	-	236,161,062	281,076,656
1899.....	63,726,399	28,958,989	41,513,139	-	-	266,504,528	318,624,033
1900.....	65,154,594	32,372,394	46,574,780	-	-	305,140,242	356,394,095
1901.....	67,035,615	36,249,145	50,601,205	95,169,631 ⁴	221,624,664 ⁴	349,573,327	420,003,743
1902.....	69,869,670	40,212,943	55,412,598	104,424,203	244,062,545	390,370,493	466,963,829
1903.....	76,453,125	47,761,536	60,244,072	112,461,757	269,911,501	424,167,140	507,527,550
1904.....	79,234,191	52,082,335	61,769,888	117,962,023	307,007,192	470,265,744	554,014,076
1905.....	82,655,828	56,474,124	64,025,643	138,116,550	338,411,275	531,243,476	618,678,633
1906.....	91,035,604	64,002,266	70,638,870	165,144,589	381,778,705	605,968,513	713,790,553
1907.....	95,953,732	69,806,892	75,784,482	166,342,144	413,014,657	654,839,711	769,026,924
1908.....	96,147,526	72,041,265	71,401,697	169,721,755	406,103,063	658,367,015	762,077,184
1909.....	97,329,333	75,887,695	73,943,119	225,414,828	464,635,263	783,298,880	882,598,547
1910.....	98,787,929	79,970,346	82,120,303	260,232,399	532,087,627	909,964,839	1,019,177,601
1911.....	103,009,256	88,892,256	89,982,223	304,801,755	568,976,209	980,433,788	1,097,661,393
1912.....	112,730,943	102,090,476	100,146,541	359,431,895	625,705,765	1,102,910,383	1,240,124,354
1913.....	116,297,729	109,129,393	105,265,336	387,214,143	626,199,470	1,126,871,523	1,287,372,534
1914.....	114,759,807	113,130,626	104,600,185	346,069,908	656,760,687	1,144,211,363	1,309,944,006
1915.....	113,982,741	113,020,310	105,137,092	358,444,252	690,904,274	1,198,340,315	1,353,629,123
1916.....	113,175,353	112,989,541	126,691,913	428,717,781	780,842,383	1,418,035,429	1,596,905,337
1917.....	111,637,755	116,060,997	161,029,606	468,409,790	928,271,838	1,643,203,020	1,866,228,326
1918.....	110,618,504	114,041,500	198,465,254	587,342,904	966,341,499	1,912,395,780	2,184,359,820
1919.....	115,004,960	121,160,774	118,919,261	621,076,065	1,125,202,403	2,189,428,885	2,495,552,568
1920.....	123,617,120	128,756,690	228,800,379	653,862,869	1,239,308,076	2,438,079,792	2,784,068,698
1921.....	129,096,339	134,104,030	194,621,710	551,914,643	1,289,347,063	2,264,556,736	2,656,454,190
1922.....	125,456,485	129,627,270	166,466,109	502,781,234	1,191,637,004	2,120,997,030	2,364,822,657
1923.....	124,373,293	126,441,667	170,420,792	523,170,930	1,197,277,065	2,107,606,111	2,374,308,376
1924.....	122,409,504	123,841,666	166,136,765	511,218,736	1,198,246,414	2,130,621,760	2,438,771,001
1925.....	118,831,327	123,108,366	165,235,168	531,180,578	1,269,542,584	2,221,160,611	2,532,832,064
1926.....	116,638,254	125,441,700	168,885,995	553,322,935	1,340,559,021	2,277,192,043	2,604,601,786
1927.....	121,666,774	130,320,897	172,100,768	596,069,007	1,399,062,201	2,415,132,260	2,758,324,713
1928.....	122,839,879	134,087,485	176,716,979	677,467,295	1,496,608,451	2,610,594,865	3,044,742,165
1929.....	137,269,085	150,636,682	178,291,030	696,387,381	1,479,870,058	2,696,747,857	3,215,503,098
1930.....	144,560,874	160,639,246	159,341,085	622,895,347	1,427,569,716	2,516,611,587	2,909,530,263
1931.....	144,674,853	162,075,000	141,969,350	578,604,394	1,437,976,832	2,422,834,828	2,741,554,219
1932.....	144,500,000	162,000,000	132,165,942	486,270,764	1,376,325,128	2,256,639,530	2,546,149,789
1933.....	144,500,000	157,250,000	130,362,488	488,527,864	1,378,497,944	2,236,841,539	2,517,934,260
1934.....	144,916,667	132,604,166	135,537,793	513,973,506	1,372,817,869	2,274,607,936	2,548,720,434
1935.....	145,500,000	132,750,000	125,644,102	568,615,373	1,445,281,247	2,426,760,923	2,667,950,352
1936.....	145,500,000	133,000,000	119,507,306	618,340,561	1,518,216,945	2,614,895,597	2,855,622,232
1937.....	145,500,000	133,750,000	110,259,134	691,319,545	1,573,654,555	2,775,530,413	3,025,721,653

¹ Includes the deposits of Dominion and Provincial Governments and also, since 1901, deposits elsewhere than in Canada.² Includes other liabilities to the public.³ Six-month average.⁴ First year reported.

Chartered Banking Business, calendar years, 1867-1937.

indicate that no information is available under the corresponding column heads for the years indicated.

ASSETS.

Cal- endar Year.	Specie and Dominion or Bank of Canada Notes. ¹	Dominion and Provincial Government Securities.	Municipal Securities in Canada and Public Securities Elsewhere.	Total Securities.	Total Loans.	Total Assets. ²	P.C. of Public Lia- bilities to Total Assets. ³
	\$	\$	\$	\$	\$	\$	p.c.
1867 ⁴	-	-	-	-	53,889,703	78,294,670	55.27
1868	-	-	-	-	52,299,050	79,860,976	56.53
1869	-	-	-	-	56,433,953	86,283,693	59.04
1870	-	-	-	-	66,276,961	103,197,103	63.65
1871	-	-	-	-	84,799,841	125,273,631	64.06
1872	-	-	-	-	106,744,665	148,862,445	61.04
1873	-	-	-	-	119,274,317	166,056,595	56.60
1874	-	-	-	-	131,680,111	187,921,031	61.95
1875	-	-	-	-	136,029,307	186,255,330	56.17
1876	-	-	-	-	127,621,577	183,499,801	54.29
1877	-	-	-	-	125,681,658	181,019,194	55.14
1878	-	-	-	-	119,682,659	175,450,274	54.45
1879	-	-	-	-	113,485,108	173,548,490	55.75
1880	-	-	-	-	102,166,115	184,276,190	60.69
1881	-	-	-	-	116,953,497	200,613,879	63.39
1882	-	-	-	-	140,077,194	227,426,335	65.86
1883	-	-	-	-	143,944,957	228,084,650	63.98
1884	-	-	-	-	130,490,053	219,998,642	62.50
1885	-	-	-	-	126,827,792	219,147,080	63.32
1886	-	-	-	-	132,833,313	228,061,872	64.44
1887	-	-	-	-	139,753,755	230,393,072	64.98
1888	-	-	-	-	141,002,373	243,504,164	67.35
1889	-	-	-	-	149,958,950	253,789,803	68.18
1890	-	-	-	-	153,301,335	254,546,329	68.05
1891	-	-	-	-	171,082,677	269,307,032	69.56
1892	17,794,201 ⁴	-	-	-	193,455,833	291,635,251	71.34
1893	19,714,648	-	-	-	206,623,042	302,696,715	71.75
1894	22,371,954	-	-	-	204,124,939	307,520,020	71.87
1895	22,992,872	-	-	-	203,730,800	316,536,510	72.50
1896	22,318,627	-	-	-	213,211,996	320,937,643	72.39
1897	24,178,151	-	-	-	212,014,635	341,163,505	74.06
1898	25,330,564	-	-	-	223,806,320	370,583,991	75.86
1899	26,682,971	-	-	-	251,467,076	412,504,768	77.24
1900	29,047,382	-	-	-	279,279,761	459,715,065	77.52
1901	32,088,501	11,331,385 ⁴	13,031,176 ⁴	-	388,299,888	531,829,324	78.97
1902	35,478,598	9,804,998	14,487,632	-	430,662,670	585,761,109	79.72
1903	42,510,574	11,186,607	14,896,472	-	472,019,689	641,543,226	79.11
1904	50,307,871	10,705,202	15,560,145	-	509,011,993	695,417,756	79.67
1905	56,590,323	8,833,626	18,820,985	-	559,814,918	767,490,183	80.61
1906	61,237,581	9,860,614	20,460,670	-	655,869,879	878,512,076	81.25
1907	70,550,520	9,546,927	21,198,817	-	709,975,274	945,685,708	81.32
1908	80,654,276	9,522,743	19,788,937	-	670,170,833	941,290,619	80.96
1909	95,558,461	11,653,798	21,707,363	-	762,195,546	1,067,007,534	82.72
1910	104,735,626	14,741,621	21,696,987	-	870,100,890	1,211,452,351	84.13
1911	120,146,690	10,637,580	22,848,170	-	926,909,616	1,303,131,260	84.23
1912	132,853,405	9,388,968	22,586,119	-	1,061,843,991	1,470,065,478	84.36
1913	141,872,884	9,995,237	23,183,162	-	1,109,493,263	1,530,093,671	84.14
1914	165,845,957	11,697,603	22,707,738	-	1,101,880,924	1,555,676,395	84.20
1915	208,438,854	12,814,898	31,553,091	-	1,066,252,854	1,596,424,643	84.75
1916	230,113,831	29,717,007	17,902,686	-	1,135,866,531	1,839,286,709	86.82
1917	265,389,567	131,078,854	138,341,125	-	1,219,161,252	2,111,559,555	88.38
1918	351,762,841	162,821,026	252,936,568	-	1,339,660,669	2,432,331,418	89.81
1919	370,775,723	214,621,625	256,270,715	-	1,552,971,202	2,754,568,118	90.60
1920	367,165,054	210,356,255	210,826,991	-	1,935,449,637	3,064,133,943	90.86
1921	335,081,032	166,688,146	156,552,503	-	1,781,184,731	2,841,782,079	89.96
1922	305,522,425	198,826,031	90,131,491	-	1,643,643,443	2,638,776,483	89.62
1923	291,999,879	242,292,315	112,642,627	401,792,206 ⁴	1,606,932,483	2,643,773,986	92.16
1924	266,961,330	314,099,097	135,597,860	502,561,847	1,546,792,080	2,701,427,011	90.28
1925	259,714,043	358,344,887	147,563,292	565,505,647	1,562,017,009	2,789,619,061	90.80
1926	252,754,268	343,595,936	127,765,375	532,817,056	1,682,379,658	2,864,019,213	90.94
1927	252,188,447	324,580,796	133,314,843	520,971,402	1,839,905,275	3,029,680,616	91.04
1928	264,804,251	333,837,004	124,996,823	522,628,208	2,072,403,628	3,323,163,195	91.62
1929	261,625,173	341,744,572	104,309,024	499,015,138	2,279,247,504	3,528,468,027	91.13
1930	232,016,616	316,196,343	101,585,131	471,637,542	2,064,597,746	3,237,073,853	89.88
1931	207,983,857	454,386,965	154,829,056	674,357,232	1,764,088,477	3,066,018,472	89.42
1932	206,925,103	489,709,241	150,891,599	695,758,801	1,582,667,313	2,869,429,779	88.73
1933	209,550,285	626,881,709	137,834,318	841,151,958	1,409,067,110	2,831,393,641	88.93
1934	214,419,280	683,498,403	139,850,099	866,725,958	1,373,683,071	2,837,919,961	89.81
1935	227,692,952 ⁴	860,942,292	137,764,626	1,044,351,653	1,276,430,825	2,956,577,704	90.24
1936	240,596,447 ⁴	1,074,795,141	161,879,725	1,330,808,991	1,140,557,800	3,144,506,755	90.81
1937	249,372,724 ⁴	1,118,893,938	181,972,016	1,426,271,394	1,200,574,223	3,317,087,132	91.22

¹ Including deposits in Central Gold Reserves, 1913-34.² Includes other assets.³ Six-month average.⁴ First year reported.⁵ Specie and notes of, and deposits in, the Bank of Canada.⁶ Ten-month average.

10.—Assets of Chartered Banks, 1929, 1932, and 1935-37.

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year. As the first two items have been worked out only to the nearest million for the years prior to 1936, the totals are not the exact sums of the individual items.

Item.	1929.	1932.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
Cash reserve against Canadian deposits (as per Table 7).....	212,000,000	186,000,000	216,000,000	225,126,826	239,893,026
Secured bank-note issue.....	25,000,000	2,000,000	1	Nil	Nil
Subsidiary coin.....	2	2	5,795,547 ³	5,430,512	5,075,458
Notes of other Canadian banks.	16,807,334	11,247,365	7,131,768	6,592,665	6,048,097
Cheques of other banks.....	149,545,199	82,948,867	95,892,529	107,274,939	110,292,586
Deposits at other Canadian banks.....	4,698,323	3,461,775	4,796,596	4,581,657	4,584,844
Gold and coin abroad.....	24,797,260	19,089,489	9,703,723	10,039,218	4,403,340
Foreign currencies.....	19,468,671	16,022,766	21,713,478	23,678,115	23,086,428
Deposits at United Kingdom banks.....	4,826,444	9,383,994	21,693,367	28,842,740	23,783,213
Deposits at foreign banks.....	86,178,585	97,999,358	87,022,098	91,808,124	96,487,680
Securities—					
Dominion and Provincial Government securities....	341,744,572	489,709,241	860,942,292	1,074,795,141	1,118,893,938
Other Canadian and foreign public securities.....	104,309,024	150,891,599	137,764,626	161,879,725	181,972,016
Other bonds, debentures, and stocks.....	52,961,542	55,157,961	45,644,735	94,134,125	125,506,440
Call and Short Loans—					
In Canada.....	267,271,438	117,224,745	82,395,250	93,225,528	107,443,328
Elsewhere.....	301,091,053	84,227,574	71,554,988	64,379,795	67,697,568
Current Loans—					
Canada—					
Loans to Provincial Governments.....	19,002,655	34,386,119	25,788,750	20,729,091	19,652,784
Loans to cities, towns, municipalities, and school districts.....	93,325,211	130,567,792	108,029,440	99,940,882	97,769,341
Other current loans and discounts.....	1,342,666,883	1,032,081,481	828,722,109	698,689,782	731,660,179
Elsewhere than in Canada...	248,367,887	171,861,621	145,719,541	150,338,542	164,776,853
Non-current loans.....	7,522,377	12,317,980	14,220,747	13,254,180	11,574,170
Other Assets—					
Real estate, other than bank premises.....	5,618,820	7,141,708	8,419,183	8,795,431	8,662,108
Mortgages on real estate sold by the banks.....	7,221,774	6,244,908	5,456,314	4,796,988	4,228,687
Bank premises.....	75,536,822	79,714,603	76,794,405	75,446,272	74,420,237
Bank circulation redemption fund.....	6,246,861	6,721,355	6,808,157	6,971,506	6,697,792
Liabilities of customers under letters of credit as per <i>contra</i>	100,473,805	48,671,585	55,037,693	62,011,410	69,512,423
All other assets.....	11,957,574	14,520,279	15,058,189	11,743,561	12,964,696
Totals, Assets.....	3,528,468,027	2,869,429,779	2,956,577,704	3,144,506,755	3,317,087,132

¹ System changed due to establishment of the Bank of Canada.

² Ten-month average.

³ Included in first item.

11.—Liabilities of Chartered Banks, 1929, 1932, and 1935-37.

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year.

Item.	1929.	1932.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
LIABILITIES TO THE PUBLIC.					
Notes in Circulation.....	178,291,030	132,165,942	125,644,102	119,507,306	110,259,134
Deposit Liabilities—					
Government Deposits—					
Dominion.....	77,815,312	55,598,660	25,457,951	37,829,790	47,244,049
Provincial.....	24,536,732	26,151,681	39,333,219	39,338,129	42,705,268
Public Deposits—					
Demand.....	696,387,381	486,270,764	568,615,373	618,340,561	691,319,545
Time.....	1,479,870,058	1,376,325,128	1,445,281,247	1,518,216,945	1,573,654,555
Foreign.....	418,138,374	312,293,297	348,078,133	401,170,172	420,606,996
Inter-Bank Deposits—					
Canadian.....	14,528,474	10,694,683	12,964,738	13,648,502	14,572,664
United Kingdom.....	25,693,879	5,131,001	9,826,626	9,490,214	12,208,396
Other.....	100,254,711	49,732,341	26,307,060	30,152,038	37,432,300
Totals, Deposit Liabilities.....	2,837,224,921	2,822,197,555	2,475,859,547	2,668,186,351	2,839,743,773
Canadian currency (estimated)	2,293,000,000	1,955,000,000	2,108,000,000	2,245,000,000	2,382,000,000
Foreign currency (estimated)	544,000,000	867,000,000	368,000,000	423,000,000	458,000,000
Totals, Note and Deposit Liabilities.....	3,015,515,951	2,454,363,497	2,601,503,649	2,787,693,657	2,950,002,907
Advances under the Finance Act.....	82,916,667	37,352,667	5,836,417	Nil	Nil
Other Liabilities to the Public—					
Bills payable.....	10,842,329	1,579,945	1,169,690	1,052,312	953,701
Letters of credit outstanding.	100,473,804	48,671,585	55,037,693	62,011,410	69,512,423
Liabilities not included under foregoing heads.....	5,754,347	4,182,095	4,402,903	4,864,853	5,252,622
TOTALS, LIABILITIES TO THE PUBLIC.....	3,215,503,098	2,546,149,789	2,667,950,352	2,855,622,232	3,025,721,653
LIABILITIES TO SHAREHOLDERS.					
Capital.....	137,269,085	144,500,000	145,500,000	145,500,000	145,500,000
Rest or reserve fund.....	150,636,682	162,000,000	132,750,000	133,000,000	133,750,000
Grand Totals, Liabilities.....	3,503,408,865	2,852,649,789	2,946,200,352	3,134,122,232	3,304,971,653

12.—Ratio Comparisons of Certain Assets and Liabilities of Chartered Banks, 1926-37.

NOTE.—Yearly averages of month-end figures, except where otherwise specified.

Year.	Canadian Cash to Canadian Deposits.		Securities to Note and Deposit Liabilities.	Loans to Note and Deposit Liabilities.
	Daily. ¹	Month-End.		
	p.c.	p.c.		
1926.....	9.8	10.1	21.3	67.2
1927.....	9.0	9.4	19.7	69.4
1928.....	8.5	9.1	18.2	72.0
1929.....	8.3	9.2	16.6	75.6
1930.....	8.2	9.2	17.1	74.6
1931.....	8.1	8.6	25.5	66.7
1932.....	8.8	9.5	28.4	64.5
1933.....	9.8	10.1	34.8	58.2
1934.....	10.2	10.3	35.3	56.0
1935.....	10.1	10.2	40.1	49.1
1936.....	10.2	10.0	47.7	40.9
1937.....	10.2	10.1	48.4	40.7

¹ Daily average Canadian cash to Canadian deposits; figures supplied by the Bank of Canada.

Classification of Deposits and Loans.—As a result of an amendment to the Bank Act in 1934, deposits and loans are required to be classified according to size of the deposit, or purpose of the loan, each year. The figures cover deposits and loans in Canada only. Statistics for 1934 will be found at p. 902 of the 1937 Year Book.

13.—Classification of Deposits, According to Size, in Chartered Banks in Canada, as at Oct. 31, 1935-37.

Kind and Size of Deposit.	1935.		1936.		1937.	
	No.	\$	No.	\$	No.	\$
Deposits Payable on Demand—						
\$1,000 or less.....	574,333	76,008,059	580,008	81,662,728	596,830	84,938,517
\$1,000 to \$5,000.....	39,294	80,086,361	43,622	89,701,847	47,438	97,755,972
\$5,000 to \$25,000.....	9,355	95,421,344	10,469	108,384,569	11,416	114,786,855
\$25,000 to \$100,000.....	2,126	99,676,371	2,328	107,745,525	3,542	115,483,832
Over \$100,000.....	752	271,030,681	697	279,808,927	765	264,111,589
Adjustment items.....	—	2,713,508	—	—3,021,929	—	2,048,380
Totals.....	625,860	624,936,324	637,124	664,281,667	659,991	679,125,145
Deposits Payable After Notice—						
\$1,000 or less.....	3,716,326	425,873,551	3,664,756	432,501,930	3,770,692	456,017,245
\$1,000 to \$5,000.....	263,449	518,525,239	268,525	537,147,512	274,810	551,364,607
\$5,000 to \$25,000.....	32,460	280,898,088	34,224	297,615,548	36,343	315,602,966
\$25,000 to \$100,000.....	2,276	99,785,473	2,313	99,078,550	2,371	103,622,340
Over \$100,000.....	471	136,199,058	496	141,338,693	536	154,100,491
Adjustment items ¹	—	4,290,265	—	2,637,199	—	2,987,073
Totals.....	4,014,982	1,465,571,674	3,970,314	1,510,319,432	4,084,752	1,583,694,722

¹ Representing certified cheques, interest accrued on interest-bearing accounts, items in transit, etc.

14.—Loans, According to Class, made by Chartered Banks in Canada and Outstanding as at Oct. 31, 1935-37.

Class of Loan.	1935.	1936.	1937.
	\$	\$	\$
Provincial Government.....	29,651,382	14,711,533	26,384,534
Municipal government and school district.....	96,777,122	91,982,393	94,187,869
Agricultural—			
(a) Loans to farmers, cattlemen, and fruit growers....	59,949,953	53,959,605	57,490,784
(b) Loans to grain dealers, grain exporters and seed merchants.....	166,441,828	64,528,319	30,803,892
Totals, Agricultural.....	226,391,781	118,487,924	88,294,676
Financial—			
(a) Call loans and other accommodation to brokers and bond dealers.....	66,697,883	97,376,547	73,531,185
(b) Loans to trust, loan, mortgage, investment and insurance companies and other financial institutions.....	63,132,592	73,830,397	68,966,413
(c) Loans to individuals against approved stocks and bonds not otherwise classified.....	101,183,396	111,462,635	142,798,237
Totals, Financial.....	231,013,871	282,669,579	285,295,835
Merchandising, wholesale and retail.....	113,767,896	115,889,919	129,635,451
Manufacturing—dealers in, lumber, pulpwood, and products thereof.....	72,974,075	64,850,267	62,949,545
Other manufacturing of all descriptions.....	119,200,354	129,962,252	156,555,520
Mining.....	6,812,425	6,898,818	6,109,791
Fishing, including packers and curers of fish.....	7,207,205	8,193,886	7,709,483
Public utility, including transportation companies.....	71,265,693	8,387,018	11,948,007
Building—contractors and others for building purposes.....	24,125,443	23,719,245	33,579,276
Charitable and religious institutions—churches, parishes, hospitals, etc.....	16,101,300	14,797,993	16,408,806
Other.....	52,320,478	52,986,222	61,567,831
Grand Totals.....	1,067,609,025	933,537,049	980,626,624

Clearing-House Transactions.—In advanced industrial societies money is only 'the small change of commerce'. The great bulk of monetary transfers, particularly in the case of the larger transactions, is made through the banks. Thus it has been estimated that in the United States in 1917 about 6 p.c. of the business transactions of the country were financed by the use of money and the remaining 94 p.c. by the use of cheques. Accordingly, if we knew the aggregate amount of the cheques paid through the banks and charged to accounts, we should have an almost complete record of the volume of business transacted, and thus of the business activity of the country.

Statistics of this character were at first secured through the operation of the clearing houses—places where the representatives of all the banks met daily in the leading cities and presented for payment the notes of other banks and the cheques drawn upon other banks that had been paid in to their institutions in the regular course of business. In Canada, the first clearing houses to be established were those of Halifax (1887), Montreal (1889), Toronto (1891), Hamilton (1891), and Winnipeg (1893), and the number has subsequently increased to 32.

For the purpose of the Central Clearing Settlement, each bank maintains in its account with the Bank of Canada, Ottawa, a balance (in excess of whatever deposit is maintained as part of the 5 p.c. reserve against deposit liabilities in Canada required by statute) deemed sufficient to settle its clearing obligations. Montreal, Ottawa, Toronto, Winnipeg, and Vancouver are settlement points for the clearing houses in their respective zones. The debit or credit balances of the banks at the specified points are daily communicated by the clearing-house manager, and confirmed by the respective bank, to the local Agent of the Bank of Canada (to the Bank of Canada in the case of Ottawa) for transmission to the Bank of Canada at Ottawa by telephone or telegraph, which bank on the same day debits or credits, as the case may be, the account of the respective bank maintained with the Bank of Canada. By this means practically all the banking transactions of the country are adjusted daily in Ottawa in the accounts maintained by the banks with the Bank of Canada.

Table 15 shows for the years 1933-37 the total volume of clearings in the clearing houses of Canada. These figures, it may be added, represent not only actual city clearings but exchanges between numerous rural branches in each district.

15.—Amounts of Exchanges of the Clearing Houses of Chartered Banks in Canada for the calendar years 1933-37.

NOTE.—For the years 1919-23, see p. 806 of the 1924 Year Book; for 1924-28, p. 859 of the 1929 Year Book; and for 1929-32, p. 911 of the 1933 Year Book.

Clearing House.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
Brandon.....	14,533,366	15,458,987	15,020,604	16,404,775	16,950,884
Brantford.....	36,878,757	38,456,332	41,207,595	45,356,164	50,506,997
Calgary.....	256,392,620	255,085,201	292,584,549	305,417,532	306,818,075
Chatham.....	21,461,353	22,211,932	22,192,630	25,865,402	31,781,621
Edmonton.....	173,437,240	189,164,864	199,411,079	197,022,175	206,183,407
Fort William.....	26,551,158	32,061,443	30,651,099	37,944,014	40,556,659
Halifax.....	100,859,483	110,685,559	112,710,681	119,545,816	134,094,626
Hamilton.....	175,111,440	191,235,709	197,844,548	236,482,873	285,024,414
Kingston.....	25,953,786	26,825,520	26,779,593	28,025,967	29,466,619

15.—Amounts of Exchanges of the Clearing Houses of Chartered Banks in Canada for the calendar years 1933-37—concluded.

Clearing House.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
Kitchener.....	43,365,053	50,268,751	50,414,984	54,834,963	56,542,066
Lethbridge.....	17,301,733	20,785,708	23,963,854	24,105,821	25,229,839
London.....	116,906,848	128,018,177	134,707,964	145,222,921	146,861,077
Medicine Hat.....	9,819,336	10,988,541	12,995,361	12,367,706	12,092,715
Moncton.....	31,577,841	34,991,249	35,753,000	37,250,494	41,278,230
Montreal.....	4,249,531,044	4,653,226,857	4,582,416,573	5,386,188,857	5,871,146,518
Moose Jaw.....	25,548,000	24,740,854	27,283,900	31,587,919	30,976,707
New Westminster...	21,278,157	25,028,251	27,463,691	32,166,195	35,055,324
Ottawa.....	196,686,205	219,698,923	1,076,864,472	1,132,979,446	1,091,883,251
Peterborough.....	27,848,985	30,920,440	31,325,062	32,347,673	32,660,582
Prince Albert.....	12,108,245	14,357,763	18,437,203	17,814,604	18,048,670
Quebec.....	191,774,625	200,669,727	207,012,322	222,901,251	264,680,505
Regina.....	170,858,649	181,277,356	191,995,407	218,683,823	186,954,514
Saint John.....	74,776,201	84,066,825	84,059,113	90,730,398	99,326,689
Sarnia.....	18,781,336	20,886,635	23,082,010	23,754,497	24,842,473
Saskatoon.....	59,500,613	65,343,280	74,956,723	77,033,722	70,019,704
Sherbrooke.....	27,452,934	28,628,148	28,659,155	29,959,127	35,528,449
Sudbury.....	26,470,130	34,881,455	38,895,230	46,340,527	50,746,395
Toronto.....	4,916,531,044	5,643,522,459	5,720,065,081	6,465,263,740	6,397,987,564
Vancouver.....	667,955,703	755,532,352	781,264,535	953,566,363	975,233,058
Victoria.....	69,300,609	73,931,173	79,007,806	87,484,888	89,962,678
Windsor.....	106,323,870	104,459,995	115,902,542	142,249,058	161,779,776
Winnipeg.....	2,807,734,669	2,676,160,032	2,622,557,766	2,925,627,890	2,030,163,981
Totals.....	14,720,611,033	15,963,570,498	16,927,486,132	19,202,526,601	18,850,384,667

Bank Debits.—As the number of separate banks has in recent years been steadily diminishing through amalgamations (see pp. 916 to 917), there being only 10 in December, 1937,* as compared with 18 in 1923, inter-bank transactions are a steadily decreasing proportion of total business transacted, and bank clearings have ceased to be a satisfactory measure of general business. The Canadian Bankers' Association agreed to secure from January, 1924, the monthly aggregate figures of the amount of cheques charged to accounts at all banking offices situated in the clearing-house centres of Canada, and monthly and annual figures of cheques charged to accounts (bank debits) have been published since that time by the Dominion Bureau of Statistics. Further, in order that an estimate might be made of the proportion of banking transactions outside the clearing-house cities to the total, the Canadian Bankers' Association secured for the month of January, 1935, the grand total of all cheques charged to accounts at all branch banks throughout the Dominion. The results were published in the Bureau's Monthly Review of Bank Debits for February, 1935, and showed that the aggregate of transactions outside the clearing-house cities was in January, 1935, 12½ p.c. of the grand total in the clearing-house cities. The corresponding figures in the five economic areas were as follows: Maritime Provinces 104.2 p.c.; Quebec 6.9 p.c.; Ontario 13.5; Prairie Provinces 8.4 p.c.; British Columbia 16.7 p.c. Only in the Maritime Provinces did the total of bank debits in clearing-house cities appear to represent inadequately the grand total of business transactions.

*Barclays Bank, established in 1929, was the latest addition to the commercial chartered banks in Canada; the number has remained at 10 since 1931.

16.—Bank Debits at the Clearing-House Centres of Canada, by Individual Centres, calendar years, 1933-37.

NOTE.—For the years 1924-28, see pp. 860-861 of the 1929 Year Book; and for 1929-32, p. 912 of the 1933 Year Book.

Clearing-House Centre.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
Maritime Provinces—					
Halifax.....	254,222,616	275,948,590	310,052,273	341,775,552	406,591,857
Moncton.....	72,568,809	87,228,253	90,680,025	98,641,301	112,550,923
Saint John.....	154,222,107	171,074,214	173,320,562	189,985,161	214,216,666
Totals.....	481,013,532	534,251,057	574,052,860	630,402,014	733,359,446
Quebec—					
Montreal.....	7,943,786,599	8,834,691,435	8,307,134,410	10,150,016,770	10,596,261,705
Quebec.....	558,047,475	550,663,976	606,964,150	717,146,205	888,524,702
Sherbrooke.....	65,236,186	64,354,455	63,430,463	71,484,756	83,035,135
Totals.....	8,567,070,260	9,449,709,866	8,977,529,023	10,938,647,731	11,568,821,542
Ontario—					
Brantford.....	80,401,856	84,950,018	94,186,017	103,221,469	120,088,991
Chatham.....	64,147,944	71,122,708	79,902,107	100,652,126	111,553,991
Fort William.....	47,791,570	49,838,324	50,202,917	63,348,734	68,085,229
Hamilton.....	460,728,640	528,307,959	559,388,191	601,358,570	691,483,173
Kingston.....	51,473,716	52,719,962	55,634,971	67,867,438	76,687,282
Kitchener.....	93,144,698	108,804,353	114,191,829	128,018,389	143,265,155
London.....	299,130,638	334,741,204	362,317,629	420,889,625	413,075,352
Ottawa.....	1,339,009,715	1,914,296,966	1,444,156,227	1,469,292,434	1,348,844,155
Peterborough.....	49,090,223	53,767,240	60,023,193	68,620,664	75,770,408
Sarnia.....	86,377,931	78,158,895	69,145,537	74,160,267	81,347,420
Sudbury.....	41,886,025	48,991,202	55,597,151	72,735,265	88,780,681
Toronto.....	10,221,687,968	11,389,321,892	10,642,516,427	12,168,836,487	12,236,885,028
Windsor.....	192,566,981	204,483,372	289,364,280	439,678,369	493,282,632
Totals.....	13,027,437,905	14,919,504,095	13,876,626,476	15,778,679,837	15,939,149,497
Prairie Provinces—					
Brandon.....	27,283,657	26,885,135	25,666,690	28,313,991	31,358,553
Calgary.....	557,891,735	526,966,099	616,831,075	636,145,594	658,768,183
Edmonton.....	366,409,278	382,681,968	400,418,426	387,386,725	417,969,669
Lethbridge.....	36,911,296	42,671,124	48,945,714	45,780,043	51,787,553
Medicine Hat.....	21,505,530	25,377,296	27,322,542	26,842,729	26,611,236
Moose Jaw.....	48,696,759	51,316,748	53,874,399	77,376,584	73,307,647
Prince Albert.....	17,844,842	21,106,682	24,434,064	25,976,662	28,790,736
Regina.....	439,593,195	475,031,328	505,052,792	495,621,447	428,357,691
Saskatoon.....	100,029,783	102,963,180	110,058,112	121,553,190	121,374,564
Winnipeg.....	4,798,187,549	4,682,240,160	4,632,791,950	4,660,521,712	2,988,695,575
Totals.....	6,414,353,624	6,337,239,720	6,445,395,764	6,505,518,677	4,827,021,407
British Columbia—					
New Westminster.....	47,213,108	52,390,693	59,819,150	70,089,850	74,751,206
Vancouver.....	1,207,251,145	1,320,856,775	1,349,924,217	1,682,786,803	1,692,513,585
Victoria.....	237,125,920	252,720,716	262,718,851	322,481,831	330,844,455
Totals.....	1,491,590,173	1,625,968,184	1,672,462,218	2,075,358,484	2,098,109,246
Grand Totals.....	29,981,465,494	32,866,672,922	31,546,066,341	35,928,606,743	35,166,061,138

Subsection 3.—Statistics of Individual Chartered Banks.

Assets and Liabilities.—Tables 17 and 18 show, respectively, the principal and total assets and liabilities of the individual banks for the years 1929 and 1934-37, the figures being averages computed from the monthly bank returns. The statistics in column 2 of Table 17 represent, for years prior to 1935, when the Bank of Canada was established, the totals of the banks' holdings of gold and coin in Canada, Dominion notes, and that part of their deposits in the Central Gold Reserves not required against their note issues; they now represent the total of Bank of Canada notes in the possession of the chartered banks together with their deposits at the Bank of Canada. Figures for this column have been supplied by the Bank of Canada.

17.—Principal and Total Assets of Individual Chartered Banks, 1929 and 1934-37.

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year.

Bank.	Year.	Cash Reserve against Canadian Deposits.	Total Securities.	Total Loans.	Total Assets.
		\$	\$	\$	\$
Bank of Montreal.....	1929	86,400,000	130,941,236	581,302,970	913,759,043
	1934	74,500,000	305,191,599	293,631,480	740,549,406
	1935	65,400,000	349,672,401	266,878,000	766,144,449
	1936	72,200,000	420,732,431	220,222,292	797,418,203
	1937	74,800,000	451,446,479	231,442,795	843,559,930
Bank of Nova Scotia.....	1929	18,400,000	44,107,378	172,881,551	275,257,022
	1934	19,500,000	89,293,801	120,499,723	269,496,974
	1935	23,400,000	103,828,021	110,217,442	277,368,870
	1936	20,400,000	123,250,165	105,196,805	290,605,674
	1937	21,200,000	117,296,803	116,505,352	297,863,823
Bank of Toronto.....	1929	8,700,000	17,633,621	89,012,432	134,485,442
	1934	5,900,000	39,137,354	55,606,566	114,639,430
	1935	11,000,000	43,941,167	51,748,891	121,582,723
	1936	11,500,000	58,430,476	45,543,097	133,018,556
	1937	12,700,000	65,362,279	47,498,717	141,847,481
Banque Provinciale du Canada.....	1929	1,200,000	10,203,136	33,956,608	54,648,363
	1934	800,000	20,024,712	19,753,225	47,745,865
	1935	2,400,000	20,044,145	18,463,790	48,383,082
	1936	3,000,000	23,813,904	16,748,284	50,954,098
	1937	4,500,000	26,213,729	17,419,458	55,310,698
Canadian Bank of Commerce.....	1929	40,000,000	86,446,466	498,345,544	737,542,966
	1934	45,400,000	155,860,792	282,374,191	561,253,374
	1935	46,500,000	206,399,787	253,387,099	555,971,609
	1936	45,600,000	255,564,528	233,933,735	618,364,951
	1937	46,300,000	271,802,611	240,530,574	646,200,637
Royal Bank of Canada.....	1929	38,300,000	126,757,074	614,062,764	949,919,252
	1934	41,100,000	147,674,265	393,513,846	713,916,286
	1935	42,000,000	192,962,019	379,979,253	750,717,195
	1936	44,400,000	283,617,114	338,870,903	817,847,875
	1937	49,400,000	323,108,273	349,453,135	869,211,590
Dominion Bank.....	1929	7,700,000	20,378,753	99,205,694	150,976,550
	1934	5,000,000	31,683,339	66,984,948	119,809,361
	1935	8,300,000	36,766,116	62,675,908	126,554,150
	1936	10,200,000	49,856,736	56,988,446	135,785,956
	1937	9,500,000	53,952,829	59,671,160	141,619,393
Banque Canadienne Nationale.....	1929	4,400,000	39,444,192	90,376,497	155,406,098
	1934	3,400,000	44,146,522	62,287,900	125,079,011
	1935	8,300,000	49,179,738	54,918,167	128,034,699
	1936	8,600,000	61,094,262	50,519,670	137,442,533
	1937	10,100,000	55,143,091	63,037,116	145,750,652
Imperial Bank of Canada.....	1929	7,300,000	21,818,113	96,859,437	148,644,987
	1934	7,100,000	30,905,888	77,075,727	133,274,500
	1935	7,700,000	36,690,525	75,599,203	137,764,752
	1936	8,600,000	49,172,455	70,102,061	147,179,035
	1937	10,700,000	54,932,510	72,434,899	157,036,305
Weyburn Security Bank.....	1929 ¹	200,000	1,165,832	3,178,206	6,349,160
Barclays Bank (Canada).....	1929 ²	100,000	358,012	197,405	4,437,434
	1934	100,000	2,807,686	1,955,465	12,155,764
	1935	600,000	4,867,734	2,263,072	14,056,175
	1936	500,000	5,276,920	2,432,507	15,889,882
	1937	700,000	7,112,790	2,581,017	18,686,623
Totals.....	1929	212,000,000	499,015,138	2,279,247,504	3,528,468,027
	1934	203,000,000	866,725,958	1,373,683,071	2,837,919,961
	1935	216,000,000	1,044,351,653	1,276,430,825	2,956,577,704
	1936	225,000,000	1,330,808,991	1,140,557,800	3,144,506,763
	1937	240,000,000	1,426,371,394	1,200,574,223	3,317,087,132

¹ Absorbed by the Imperial Bank of Canada May 1, 1931.
 commenced business in September, 1929. The grand totals for 1929 are, however, twelve-month averages for all banks.

² Four-month average. Bank commenced business in September, 1929. The grand totals for 1929 are, however, twelve-month averages for all banks.

18.—Principal and Total Liabilities of Individual Chartered Banks, 1929 and 1934-37.

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year.

Bank.	Year.	Notes in Circulation.	Deposit Liabilities.			Liabilities to Shareholders.	Total Liabilities.
			Government.	Public.	Inter-Bank.		
		\$	\$	\$	\$	\$	\$
Bank of Montreal...	1929	44,588,405	53,303,709	680,631,822	30,303,442	70,446,677	908,926,178
	1934	34,185,593	29,904,262	575,941,584	6,988,247	74,000,000	738,498,121
	1935	29,849,273	23,491,810	617,001,769	9,486,070	74,000,000	764,351,694
	1936	28,711,578	25,252,446	647,936,495	9,557,704	74,250,000	795,463,714
	1937	24,246,142	38,833,093	679,048,576	12,511,120	75,000,000	842,093,963
Bank of Nova Scotia.....	1929	15,956,549	3,061,797	202,312,043	6,968,960	30,000,000	272,704,813
	1934	12,001,984	2,449,297	203,850,935	4,332,452	36,000,000	268,505,028
	1935	10,771,142	2,957,607	215,204,121	4,105,639	36,000,000	276,534,562
	1936	10,101,797	5,446,076	225,436,635	4,869,675	36,000,000	289,797,351
	1937	9,800,871	2,565,548	237,225,243	4,427,098	36,000,000	296,815,820
Bank of Toronto....	1929	8,334,322	1,058,293	100,825,532	4,301,318	14,127,164	132,734,214
	1934	6,271,812	1,453,638	86,269,244	1,842,095	15,000,000	113,702,659
	1935	5,260,483	1,914,259	94,232,159	2,500,251	15,000,000	120,647,696
	1936	4,680,577	3,043,809	103,774,815	3,134,582	15,000,000	132,023,164
	1937	4,225,007	2,684,423	112,252,400	3,537,407	15,000,000	140,353,623
Banque Provinciale du Canada.....	1929	4,464,714	425,790	42,296,216	121,181	5,500,000	54,146,698
	1934	3,837,903	323,887	36,750,500	50,153	5,000,000	47,388,609
	1935	3,602,388	245,491	38,919,770	45,940	5,000,000	48,052,045
	1936	3,498,552	232,101	41,795,210	59,358	5,000,000	50,652,813
	1937	3,253,591	1,515,086	45,046,361	97,644	5,000,000	55,022,562
Canadian Bank of Commerce.....	1929	33,352,567	11,530,442	529,141,722	53,207,388	55,343,749	731,593,634
	1934	24,800,103	10,508,445	442,708,474	8,386,672	50,000,000	558,813,189
	1935	25,348,088	14,619,635	466,714,142	10,233,069	50,000,000	584,120,623
	1936	24,691,592	15,432,633	496,360,221	11,366,466	50,000,000	616,580,515
	1937	22,294,347	17,766,683	518,257,897	13,767,952	50,000,000	643,936,683
Royal Bank of Canada.....	1929	41,105,812	23,341,461	700,120,040	33,889,309	68,142,960	944,796,101
	1934	31,412,978	13,656,783	570,131,891	10,637,529	55,000,000	711,379,571
	1935	30,894,509	14,668,783	614,911,650	10,559,813	55,000,000	748,444,778
	1936	30,414,628	18,790,155	677,279,767	12,096,293	55,000,000	815,579,803
	1937	29,431,462	15,695,540	726,481,376	14,886,475	55,000,000	866,173,511
Dominion Bank....	1929	7,994,871	1,890,531	107,612,958	6,009,296	15,638,582	150,041,996
	1934	6,478,601	1,298,338	89,098,687	2,349,343	14,000,000	119,247,417
	1935	6,264,324	1,343,678	97,065,461	3,234,575	14,000,000	125,952,174
	1936	6,159,670	1,816,717	106,075,402	3,192,315	14,000,000	135,145,017
	1937	5,779,618	1,964,018	111,797,450	3,498,397	14,000,000	140,886,800
Banque Canadienne Nationale.....	1929	11,796,049	3,117,266	115,948,289	1,079,893	12,598,742	153,806,492
	1934	8,102,106	2,276,750	97,741,302	1,086,559	12,000,000	124,382,852
	1935	6,660,373	1,653,758	104,903,295	1,051,327	12,000,000	127,372,211
	1936	4,825,287	1,732,259	116,279,220	1,143,784	12,000,000	136,841,502
	1937	5,145,059	1,089,900	123,767,079	2,065,425	12,000,000	144,989,351
Imperial Bank of Canada.....	1929	10,150,422	4,484,691	110,927,178	3,602,427	15,000,000	146,916,789
	1934	8,140,964	3,669,030	100,496,833	2,685,510	15,000,000	132,175,571
	1935	6,704,185	3,757,551	106,821,368	2,803,772	15,000,000	136,675,412
	1936	6,114,146	5,338,989	115,499,134	2,920,199	15,000,000	146,155,207
	1937	5,747,553	7,793,619	122,375,207	3,826,475	15,000,000	156,020,052
Weyburn Security Bank.....	1929 ¹	511,116	138,064	4,415,648	45,729	774,560	6,258,719
Barclays Bank (Canada).....	1929 ²	108,607	Nil	493,097	2,844,367	1,000,000	4,449,695
	1934	305,749	292,130	5,785,926	4,078,691	1,520,833	12,148,797
	1935	289,337	138,598	6,196,018	5,078,168	2,250,000	14,049,157
	1936	309,479	82,734	7,290,779	4,950,378	2,250,000	15,883,146
	1937	335,484	41,407	9,329,507	5,695,367	2,250,000	18,679,288
Totals.....	1929	178,291,030	102,352,044	2,594,395,813	140,477,064	287,905,767	3,503,408,865
	1934	135,537,793	65,832,560	2,208,775,376	42,437,251	277,520,833	2,826,241,267
	1935	125,644,102	64,791,170	2,361,969,753	49,098,624	278,250,000	2,946,200,352
	1936	119,507,306	77,167,919	2,537,727,678	53,290,754	278,500,000	3,134,122,232
	1937	110,259,134	89,949,317	2,685,581,096	64,213,360	279,250,000	3,304,971,653

¹ Absorbed by the Imperial Bank of Canada, May 1, 1931.² Four-month average. Bank commenced business in September, 1929. The grand totals for 1929 are, however, twelve-month averages for all banks.

Earnings of Canadian Banks.—The chartered banks of Canada are for the most part Dominion-wide institutions, doing business in all parts of the country. Their earnings, therefore, reflect with very considerable faithfulness the fluctuations of general business.

19.—Net Profits of Canadian Banks and Rates of Dividend Paid, for their business years ended 1932-37.

NOTE.—These figures are not strictly comparable owing to variations from year to year in the practices of individual banks, and between banks. With the exception of La Banque Provinciale du Canada, the profits for 1936 and 1937 are shown after deducting Dominion and Provincial Government taxes.

Bank.	1932.		1933.		1934.	
	Net Profits.	Dividend Rate.	Net Profits.	Dividend Rate.	Net Profits.	Dividend Rate.
	\$	p.c.	\$	p.c.	\$	p.c.
Bank of Montreal.....	4,663,100	11	4,005,154	8½	4,105,024	8
Bank of Nova Scotia.....	2,303,434	15	2,035,900	12½	1,850,330	12
Bank of Toronto.....	1,044,393	11	1,037,922	10	822,499	10
Banque Provinciale du Canada.....	454,659	8½	410,655	6½	417,366	6
Canadian Bank of Commerce	4,279,424	11	3,648,832	8½	3,413,654	8
Royal Bank of Canada.....	4,861,849	11	3,901,649	8½	4,398,217	8
Dominion Bank.....	1,179,931	11	1,139,202	10	1,151,561	10
Banque Canadienne Nationale.....	972,075	10	970,350	10	935,823	9½
Imperial Bank of Canada....	1,205,335	11½	1,204,039	10	1,231,992	10
Barclays Bank (Canada)....	2	—	2	—	2	—
Totals, Net Profits.....	20,964,200	—	18,353,703	—	18,326,466	—

Bank.	1935.		1936.		1937.	
	Net Profits.	Dividend Rate.	Net Profits.	Dividend Rate.	Net Profits.	Dividend Rate.
	\$	p.c.	\$	p.c.	\$	p.c.
Bank of Montreal.....	4,007,302	8	3,181,501	8	3,408,328	8
Bank of Nova Scotia.....	1,834,174	12	1,926,686	12	1,982,140	12
Bank of Toronto.....	806,391	10	1,141,810	10	1,156,372	10
Banque Provinciale du Canada.....	400,843	6	402,678	6	444,410	6
Canadian Bank of Commerce	3,389,031	8	2,909,124	8	2,934,117	8
Royal Bank of Canada.....	4,340,522	8	3,504,241	8	3,711,379	8
Dominion Bank.....	1,130,052	10	951,277	10	976,838	10
Banque Canadienne Nationale.....	915,790	8	727,935	8	774,228	8
Imperial Bank of Canada....	1,208,079	10	962,813	10	967,977	10
Barclays Bank (Canada)....	2	—	2	—	2	—
Totals, Net Profits.....	18,032,184	—	15,708,065	—	16,355,789	—

1 This bank paid at the rate of 10 p.c. per annum for the first half-year and 8 p.c. for the second.

2 None reported.

Branches of Chartered Banks.—During the period from 1881 to 1901, the number of chartered banks doing business in Canada under the Bank Act remained almost the same, 36 in 1881 and 1891, and 34 in 1901, but during the present century there has been in banking, as in industry, an era of amalgamations, the number of banks having dropped to 25 in 1913 and to 10 in 1931. That this has been far from involving a curtailment of banking facilities is seen in Table 9, which shows the development of the banking business since 1867, and in Table 20, which compares the number of branch banks existing in Canada at different periods, and shows a growth from 123 at Confederation to 4,083, inclusive of sub-agencies, at Dec. 31, 1930. Since then, owing to the shrinkage in commercial activities as a result of the depression, some unprofitable branches have been closed and the total has declined to 3,336, exclusive of 145 branches and agencies in other countries, as at Dec. 31, 1937.

20.—Numbers of Branches of Chartered Banks in Canada, by Provinces, Dec. 31, 1868, 1902, 1905, 1920, 1926, 1930, 1934-37.

Province.	1868.	1902.	1905.	1920. ¹	1926. ¹	1930. ¹	1934. ¹	1935. ¹	1936. ¹	1937. ¹
P.E. Island.....	Nil	9	10	41	28	28	27	27	27	27
Nova Scotia.....	5	89	101	169	134	138	134	134	135	134
New Brunswick.....	4	35	49	121	101	102	98	97	98	97
Quebec.....	12	137	196	1,150	1,072	1,183	1,093	1,073	1,069	1,074
Ontario.....	100	349	549	1,586	1,326	1,409	1,259	1,223	1,224	1,209
Manitoba.....	Nil	52	95	349	224	239	193	184	175	169
Saskatchewan.....	Nil	Nil	Nil	591	427	447	309	290	279	248
Alberta.....	Nil	30	87	424	269	304	215	209	200	186
British Columbia.....	2	46	55	242	186	229	195	190	187	188
Yukon.....	Nil	Nil	3	3	3	4	4	4	4	4
Totals.....	123	747	1,145	4,676	3,770	4,083	3,527	3,431	3,398	3,336

¹ Includes sub-agencies for receiving deposits for the banks employing them.

Table 21 gives the numbers of branches of the various banks, by provinces, as at Dec. 31, 1937, while Table 22 presents the statistics of branches of Canadian banks doing business outside Canada, an extension of Canadian banking (more especially to Newfoundland and the West Indies) which proceeded very rapidly in the war and early post-war period, rising to a total of 206 in 1921. Since then this number has gradually declined to 145 branches and sub-agencies in 1937.

21.—Numbers of Branches of Individual Canadian Chartered Banks in each Province and Outside Canada at Dec. 31, 1937.

NOTE.—This table does not include sub-agencies which numbered 591 in 1937, including 2 outside Canada.

Bank.	P.E. Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.
Bank of Montreal.....	1	13	13	109	191	29
Bank of Nova Scotia.....	8	36	35	21	126	7
Bank of Toronto.....	Nil	Nil	Nil	14	105	11
Banque Provinciale du Canada.....	3	Nil	13	105	14	Nil
Canadian Bank of Commerce.....	6	18	6	58	233	36
Royal Bank of Canada.....	6	63	22	77	224	60
Dominion Bank.....	Nil	Nil	1	9	98	12
Banque Canadienne Nationale.....	Nil	Nil	Nil	202	13	4
Imperial Bank of Canada.....	Nil	Nil	Nil	4	116	8
Barclays Bank (Canada).....	Nil	Nil	Nil	1	1	Nil
Totals.....	24	130	90	600	1,121	167

Bank.	Saskatchewan.	Alberta.	British Columbia.	Yukon.	Outside Canada.	Total.
Bank of Montreal.....	34	46	46	2	10	494
Bank of Nova Scotia.....	15	9	6	Nil	39	302
Bank of Toronto.....	24	7	9	Nil	Nil	170
Banque Provinciale du Canada.....	Nil	Nil	Nil	Nil	Nil	135
Canadian Bank of Commerce.....	57	45	61	2	13	535
Royal Bank of Canada.....	80	46	46	Nil	78	702
Dominion Bank.....	4	3	4	Nil	2	133
Banque Canadienne Nationale.....	2	5	Nil	Nil	1	227
Imperial Bank of Canada.....	30	21	11	Nil	Nil	190
Barclays Bank (Canada).....	Nil	Nil	Nil	Nil	Nil	2
Totals.....	246	182	183	4	143	2,890

22.—Numbers of Branches of each of the Canadian Chartered Banks in Other Countries, with their Locations, Dec. 31, 1936 and 1937.

Bank and Location.	1936.	1937.	Bank and Location.	1936.	1937.
Bank of Montreal—			Royal Bank of Canada—		
Newfoundland.....	5 ¹	5 ¹	Newfoundland.....	5	5
England.....	2	2	England.....	2	2
United States.....	3	3	British West Indies.....	11	11
Bank of Nova Scotia—			United States.....	1	1
Newfoundland.....	12	12	Cuba.....	23	23
England.....	1	1	Puerto Rico, etc.....	12	11
British West Indies.....	12 ¹	12 ¹	France (auxiliary).....	1	1
United States.....	3	3	Spain.....	1	1
Cuba.....	8	8	Central and South America.....	24	23
Puerto Rico, etc.....	3	3	Dominion Bank—		
Canadian Bank of Commerce—			England.....	1	1
Newfoundland.....	2	2	United States.....	1	1
England.....	1	1	Banque Canadienne Nationale—		
British West Indies.....	3	3	France.....	1	1
United States.....	5	5			
Cuba.....	1	1			
St. Pierre and Miquelon....	1	1			
			Totals.....	145²	143²

¹ Exclusive of one sub-agency.

² Exclusive of two sub-agencies.

Section 6.—Government and Other Savings Banks.

In a comparatively new country where capital is relatively scarce, it is a natural thing that the banks which finance the business institutions should also absorb the bulk of the people's savings for use in promoting the business of the country. Thus in Canada the great bulk of the current savings of the people is found in the savings or notice deposits of the Canadian chartered banks, the annual average figures of which are given for recent years in Table 9 of this chapter, the 1937 average being \$1,573,654,555. Further, the current savings of the Canadian people are going very largely into the purchase of life insurance, the total premiums paid in the single year 1936 aggregating \$206,806,949. In comparison with the enormous figures of notice deposits in chartered banks and with total insurance in force, the deposits in the special savings banks are comparatively small, but are none the less significant.

There are three distinct types of savings bank in Canada at the present time, in addition to the savings departments of the chartered banks and of trust and loan companies. First, there is the Post Office Savings Bank, the deposits in which are a direct obligation of the Dominion Government. Secondly, there are Provincial Government savings banking institutions in Ontario and in Alberta, where the depositor becomes a direct creditor of the province. Thirdly, there are in the province of Quebec two important savings banks, the Montreal City and District Savings Bank and the Caisse d'Economie de Notre-Dame de Québec, established under Dominion legislation and making monthly reports to the Department of Finance.

Dominion Government Savings Banks.—Prior to 1929 there were two classes of Dominion Government savings banks in Canada, the Post Office Savings Bank, under the Post Office Department, and the Dominion Government Savings Bank, attached to the Department of Finance. The former was established under the Post Office Act of 1867 (31 Vict., c. 10) in order to "enlarge the facilities now available for the deposit of small savings, to make the Post Office available for that purpose, and to give the direct security of the Dominion to every depositor for repayment of all money deposited by him together with the interest due thereon".

Branches of the Government Savings Bank proper, under the authority of the Finance Department, were established in the leading cities of Canada under the management of the Assistant Receivers General and in other places, in the provinces of Nova Scotia and New Brunswick, under managers appointed by the Governor in Council. The Dominion Government Savings Bank was amalgamated with the Post Office Savings Bank in 1929. Historical statistics for both systems will be found in Table 23 and more detailed figures covering the latest six years in Table 24.

23.—Deposits with Dominion Government Savings Banks,¹ for representative years ended June 30, 1868-1906, and Mar. 31, 1907-37.

NOTE.—Figures for all intermediate years will be found on p. 833 of the 1926 Year Book.

Fiscal Year.	Post Office Savings Bank.	Dominion Government Savings Bank.	Fiscal Year.	Post Office Savings Bank.	Dominion Government Savings Bank.
	\$	\$		\$	\$
1868.....	204,589	1,483,219	1917.....	42,582,479	13,633,610
1870.....	1,588,849	1,822,570	1918.....	41,283,479	12,177,283
1875.....	2,926,090	4,245,091	1919.....	41,654,960	11,402,098
1880.....	3,945,669	7,107,287	1920.....	31,605,594	10,729,218
1885.....	15,090,540	17,888,536	1921.....	29,010,619	10,150,189
1890.....	21,990,653	19,021,812	1922.....	24,837,181	9,829,653
1895.....	26,805,542	17,644,956	1923.....	22,357,268	9,433,839
1900.....	37,507,456	15,642,267	1924.....	25,156,449	9,055,091
1905.....	45,368,321	16,649,136	1925.....	24,662,060	8,949,073
1906.....	45,736,488	16,174,134	1926.....	24,035,669	8,794,870
1907.....	47,453,228	15,088,584	1927.....	23,402,337	8,519,706
1908.....	47,564,284	15,016,871	1928.....	23,463,210	7,640,566
1909.....	45,190,484	14,748,436	1929.....	28,375,770	"
1910.....	43,586,357	14,677,872	1930.....	26,086,036	"
1911.....	43,330,579	14,673,752	1931.....	24,750,227	"
1912.....	43,563,764	14,655,564	1932.....	23,919,677	"
1913.....	42,728,942	14,411,541	1933.....	23,920,915	"
1914.....	41,591,286	13,976,162	1934.....	23,158,919	"
1915.....	39,995,406	14,006,158	1935.....	22,547,006	"
1916.....	40,008,418	13,519,855	1936.....	22,047,287	"
			1937.....	21,879,593	"

¹ Do not include Provincial Government Savings Banks.

* Included in Post Office Savings Bank.

24.—Summary of the Financial Business of the Post Office Savings Bank, Mar. 31, 1932-37.

Item.	1932.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$	\$
Deposits during year.....	3,582,988	3,669,427	2,565,470	2,223,907	2,292,326	2,830,193
Interest on deposits.....	706,270	683,814	580,946	510,592	435,558	426,535
Totals, cash and interest....	4,289,258	4,353,241	3,146,415	2,734,499	2,727,884	3,256,728
Withdrawals.....	5,119,808	4,352,003	3,908,411	3,346,412	3,227,602	3,424,422
At credit of depositors.....	23,919,677	23,920,915	23,158,919	22,547,006	22,047,287	21,879,593

Provincial Government Savings Banks.—Institutions for the deposit of savings are operated by the Provincial Governments of Ontario and Alberta, while a similar institution was in operation in Manitoba from 1924 to 1932 when the depositors' accounts were taken over by the chartered banks.

Ontario.—In the session of 1921, the Legislature of Ontario authorized the establishment of the Province of Ontario Savings Office, and in March, 1922, the first branches were opened. The funds received from this source are used almost exclusively to finance farm loans under the Agricultural Development Act. Interest at the rate of 2 p.c. per annum compounded half-yearly is paid on accounts. The deposits are all repayable on demand. Total deposits on Jan. 31, 1938, were over \$38,600,000 and the number of depositors at that date was over 113,000. Twenty-five branches are in operation throughout the province.

Alberta.—In Alberta the Provincial Treasury receives savings deposits and issues demand savings certificates bearing interest at 2 p.c., or term certificates for one, two, or three years, in denominations of \$25 and upwards, bearing interest at 2 p.c. for one year and 2½ p.c. for two or three years. The total amount in savings certificates on Dec. 31, 1937, was \$7,278,299, made up of \$4,174,433 in demand certificates and \$3,103,866 in term certificates.

Other Savings Banks.—The Montreal City and District Savings Bank, founded in 1846 and now operating under a charter of 1871, had on Dec. 31, 1937, a paid-up capital and reserve of \$4,500,000, savings deposits of \$61,596,525, and total liabilities of \$62,651,999. Total assets amounted to \$67,696,388 including nearly \$50,000,000 of Dominion, provincial, and municipal securities. The Caisse d'Economie de Notre-Dame de Québec, founded in 1848 under the auspices of the St. Vincent de Paul Society, incorporated by Act of the Canadian Legislature in 1855 and given a Dominion charter by 34 Vic., c. 7, had on Dec. 31, 1937, savings deposits of \$13,554,387, a paid-up capital and reserve of \$2,500,000 and total assets of \$16,889,837.

The co-operative people's banks of Quebec (234 reported to the Provincial Government in 1936) are also an important element in promoting thrift and assisting business in that province. Thus on Dec. 31, 1936, savings deposits in these banks amounted to \$7,692,407, while the amount on loan was \$8,943,821. Loans granted in 1936 numbered 13,974 amounting to \$3,370,821. Profits realized amounted to \$459,601. (See also p. 783 of this volume.)

25.—Deposits in the Montreal City and District Bank and the Caisse d'Economie de Notre-Dame de Québec, as at June 30, for representative years 1868-1906, and Mar. 31, 1907-37.

NOTE.—Figures for all intermediate years will be found on p. 833 of the 1926 Year Book.

Year.	Deposits.	Year.	Deposits.	Year.	Deposits.
	\$		\$		\$
At June 30—		At Mar. 31—		At Mar. 31—	
1868.....	3,369,799	1910.....	32,239,620	1925.....	65,837,254
1870.....	5,369,103	1911.....	32,239,620	1926.....	67,241,344
1875.....	6,611,416	1912.....	34,770,386	1927.....	69,940,351
1880.....	6,681,025	1913.....	39,526,755	1928.....	72,695,422
1885.....	9,191,895	1914.....	40,133,351		
1890.....	10,908,987	1915.....	39,110,439	1929.....	70,809,603
1895.....	13,128,483	1916.....	37,817,474	1930.....	68,846,366
		1917.....	40,405,037	1931.....	69,820,422
1900.....	17,425,472	1918.....	44,139,978	1932.....	68,683,324
1905.....	25,050,966	1919.....	42,000,543	1933.....	68,113,501
1906.....	27,399,194	1920.....	46,799,877		
At Mar. 31—		1921.....	53,118,053	1934.....	66,673,219
1907.....	28,359,618	1922.....	58,576,775	1935.....	66,496,595
1908.....	28,927,248	1923.....	59,327,961	1936.....	69,665,415
1909.....	29,867,973	1924.....	64,245,811	1937.....	73,450,133

PART II.—MISCELLANEOUS COMMERCIAL FINANCE.

Section 1.—Loan and Trust Companies.*

The Canada Year Book, 1934-35, presented at p. 993 an outline of the development of loan and trust companies in Canada from 1844 to 1913.

The laws relating to trust and loan companies were revised by the Loan and Trust Companies Acts of 1914 (4-5 Geo. V, cc. 40 and 55), with the result that the statistics of provincially incorporated loan and trust companies ceased to be collected. In Table 1, however, certain summary statistics of provincial companies have been supplied for 1936 by courtesy of those companies and are included in order to complete the picture for loan and trust companies throughout Canada. The provincial figures are believed to be substantially correct. It will be noted that the totals for the division of assets of trust companies by type of asset (shown in the lower part of the table) do not agree with the totals in the upper part of the trust company section, for the reason that par values are used in the former case and book values in the latter. The statistics of Tables 2 and 3 refer only to those companies operating under Dominion charter, except that, beginning in 1925, the statistics of loan companies and trust companies incorporated by the province of Nova Scotia, and brought by the laws of that province under the examination of the Dominion Department of Insurance, have been included as well as those for trust companies in New Brunswick since 1934 in Table 3. All the tabulations of this Section have been rearranged and revised; the historical series now start with the year 1920, at which time the Dominion Department of Insurance took over the administration of the legislation concerning Dominion trust and loan companies—the Department of Finance had previously exercised supervision of their activities.

As indicating the progress of the aggregate of loan company business in Canada, it may be stated that the book value of the assets of all loan companies rose from \$188,637,298 in 1922 to \$213,649,794 in 1931, but had declined to \$196,120,255 by 1936. The assets of trust companies, not including trust, estates, and agency funds, which cannot be regarded as assets in the same sense as company and guaranteed funds, have increased from \$154,202,165 in 1928 to \$237,588,455 in 1936. In the former year, the total of trust, estates, and agency funds administered amounted to \$1,077,953,643 and in the latter year to \$2,537,931,352. (Table 1.)

Functions of Loan Companies.—The principal function of loan companies is the lending of funds on first mortgage security, the money thus made available for development purposes being secured mainly by the sale of debentures to the investing public and by savings department deposits. Of the loan companies operating under provincial charters, the majority conduct loan, savings, and mortgage business, generally in the more prosperous farming communities. The historical statistics published in Tables 1 and 2 respecting loan companies have been revised by the separation of the statistics of small loans companies, which are now included in Section 2.

Functions of Trust Companies.—Trust companies act as executors, trustees and administrators under wills or by appointment, as trustees under marriage or other settlements, as agents or attorneys in the management of the estates of the living, as guardians of minor or incapable persons, as financial agents for municipalities and companies and, where so appointed, as authorized trustees in bankruptcy. Some companies receive deposits, but the lending of actual trust funds is restricted by law. The figures of Table 1 are of particular interest in the case

* Revised under the direction of G. D. Finlayson, Superintendent of Insurance, Department of Insurance.

of trust companies, which, on account of the nature of their functions, are mainly provincial institutions, since their chief duties are intimately connected with the matter of probate, which lies within the sole jurisdiction of the provinces.

1.—Summary Statistics of the Operations of Dominion and Provincial Loan and Trust Companies in Canada, as at Dec. 31, 1936.

Item.	Provincial Companies. \$	Dominion Companies. \$	Total. \$
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LOAN COMPANIES.

Book value of assets.....	58,909,744	137,210,511	196,120,255
Liabilities to the public.....	29,326,729	101,194,542	130,521,271
Capital Stock—			
Authorized.....	42,523,375	59,150,000	101,673,375
Subscribed.....	20,329,402	26,208,900	46,538,302
Paid-up.....	18,012,979	19,361,368	37,374,347
Reserve and contingency funds.....	10,610,227	15,262,697	25,872,924
Other liabilities to shareholders.....	812,587	1,381,205	2,193,792
Total liabilities to shareholders.....	29,435,793	36,005,270	65,441,063
Net profits realized during year.....	1,035,868	1,287,563	2,323,431

TRUST COMPANIES.

Assets (Book Values)—			
Company funds.....	63,770,447	16,374,558	80,145,005
Guaranteed funds.....	121,986,843	35,456,607	157,443,450
Totals.....	185,757,290	51,831,165	237,588,455
Estates, trust, and agency funds.....	2,311,906,898	220,024,454	2,537,931,352
Capital Stock—			
Authorized.....	66,907,600	18,650,000	85,557,600
Subscribed.....	30,282,046	10,843,470	41,125,516
Paid-up.....	27,935,240	9,803,722	37,738,962
Reserve and contingency funds.....	18,830,662	4,935,216	23,765,878
Unappropriated surpluses.....	2,818,723	693,115	3,516,838
Net profits realized during year.....	2,729,120	729,405	3,458,525

CLASSIFICATION OF COMPANY FUNDS, GUARANTEED FUNDS, AND ESTATES, TRUST AND AGENCY FUNDS, BY TYPE OF ASSET (PAR VALUES).

Type of Asset.	Company Funds.		Guaranteed Funds.		Total Company and Guaranteed Funds.		Estates, Trust, and Agency Funds.	
	Provincial Com- panies.	Dominion Com- panies.	Provincial Com- panies.	Dominion Com- panies.	Provincial Com- panies.	Dominion Com- panies.	Provincial Com- panies.	Dominion Com- panies.
	\$	\$	\$	\$	\$	\$	\$	\$
Dominion and provin- cial bonds..	5,950,820	2,069,357	11,016,618	4,164,709	16,967,438	6,234,066	314,991,970	35,720,448
Mortgages...	13,574,716	5,360,064	59,407,756	20,979,239	72,982,472	26,339,303	131,798,467	33,362,386
Cash.....	1,624,137	908,014	6,880,358	1,199,866	8,504,495	2,107,880	45,579,825	5,547,643
Other Assets ¹	40,402,880	7,245,778	43,927,321	10,365,199	84,330,201	17,610,977	1,817,783,388	145,081,356
Totals....	61,552,553	15,583,213	121,232,053	36,709,013	182,784,606	52,292,226	2,310,153,650	219,711,833

¹ Including real estate, collateral loans, stocks, bonds other than Dominion and provincial issues which are not segregated in the company returns.

2.—Classification of Assets and Liabilities of Loan Companies Chartered by the Dominion Government, as at Dec. 31, 1920-36.

NOTE.—Figures given in this table do not include small loans companies (see Section 2 of this chapter, p. 937-938) and differ from those published in earlier Year Books.

ASSETS.

Year.	Real Estate. ¹	Mortgages on Real Estate.	Collateral Loans.	Bonds, Debentures, Stocks and other Company Property.	Cash on Hand and in Banks.	Interest, Rents, etc., Due and Accrued.	Total. ²
	\$	\$	\$	\$	\$	\$	\$
1920.....	4,753,049	63,725,084	1,750,128	16,593,932	3,363,877	1,658	90,413,261
1921.....	4,979,779	67,147,513	1,618,865	15,328,797	4,568,984	2,790,348	96,698,810
1922.....	5,309,854	69,824,985	1,916,976	16,967,305	4,800,649	2,989,460	102,462,090
1923.....	5,515,170	73,858,726	1,772,148	16,445,635	3,467,822	3,353,822	104,866,102
1924.....	4,035,532	71,468,506	1,722,803	18,568,856	3,636,592	2,470,756	101,919,837
1925 ³	3,982,921	79,106,407	1,532,366	20,210,387	3,442,928	2,180,700	110,638,667
1926 ³	4,150,307	89,873,578	1,161,886	18,426,169	4,284,648	2,274,535	120,321,095
1927 ³	3,999,808	102,501,193	1,585,891	18,884,434	5,672,479	2,020,087	134,669,734
1928 ³	4,172,704	105,106,365	2,472,312	17,874,808	3,255,166	1,746,138	134,634,288
1929 ³	6,156,227	103,774,850	2,266,288	17,654,463	3,186,180	1,833,545	134,877,701
1930 ³	7,069,914	105,477,328	2,420,927	20,834,907	4,291,855	2,558,238	142,657,134
1931 ³	8,104,521	106,607,563	1,020,076	23,430,382	3,282,016	3,529,451	147,094,183
1932 ³	8,263,875	102,661,879	491,387	21,521,472	4,527,610	4,366,369	142,886,473
1933 ³	8,860,817	98,357,741	240,069	18,767,937	4,311,894	5,437,535	136,990,422
1934 ³	9,112,878	97,169,985	233,458	21,693,414	4,384,592	6,532,256	140,147,053
1935 ³	9,527,647	96,008,289	306,183	20,572,693	3,670,060	6,926,558	137,994,145
1936 ³	9,770,965	97,622,787	271,660	21,175,454	3,496,046	3,928,038	137,210,511

LIABILITIES.

Year.	Liabilities to Shareholders.			Liabilities to the Public.				
	Capital Paid Up	Reserve Funds.	Total. ⁴	Debentures and Debenture Stock.		Deposits.	Interest Due and Accrued.	Total. ⁵
				Canada.	Elsewhere and Sundries.			
	\$	\$	\$	\$	\$	\$	\$	\$
1920.....	24,062,521	13,442,364	39,110,640	16,982,032	18,451,054	15,257,840		51,302,620
1921.....	25,750,966	14,278,619	40,629,689	17,682,083	20,265,766	15,868,926	480,547	54,651,433
1922.....	25,241,600	14,740,834	40,013,363	20,360,480	22,390,990	16,910,558	499,661	60,386,903
1923.....	24,939,622	14,879,516	41,239,712	22,667,861	24,315,010	15,854,029	577,460	63,600,093
1924.....	22,592,057	13,734,681	37,122,138	25,426,434	21,901,431	15,970,077	543,131	63,989,554
1925 ³	23,632,474	14,555,603	38,461,375	30,052,139	21,600,001	18,660,122	538,755	71,066,398
1926 ³	23,498,336	14,861,280	38,977,937	36,613,088	21,572,810	21,316,150	663,987	80,447,480
1927 ³	20,699,710	14,867,432	38,596,121	47,818,386	19,965,321	27,019,323	868,694	95,895,897
1928 ³	20,038,831	14,112,114	36,067,816	51,269,133	15,292,362	30,671,257	940,528	98,408,186
1929 ³	20,192,840	14,427,948	35,694,166	52,857,277	14,813,287	29,602,789	941,795	98,482,375
1930 ³	20,333,966	14,615,844	35,634,733	58,058,682	15,063,313	31,581,913	978,602	105,896,436
1931 ³	20,407,157	14,717,152	35,765,429	63,158,214	14,837,565	30,823,662	1,027,388	110,280,658
1932 ³	19,174,463	14,724,620	35,455,456	61,959,437	14,858,798	29,418,924	989,303	107,431,181
1933 ³	19,253,370	15,182,125	35,855,209	60,483,299	15,161,505	24,287,270	996,132	101,120,948
1934 ³	19,373,841	15,800,582	36,599,186	61,157,372	16,222,139	24,908,363	1,004,063	103,536,768
1935 ³	19,393,907	15,618,715	36,404,095	59,386,546	14,530,516	26,556,302	898,830	101,578,778
1936 ³	19,361,368	15,262,697	36,005,271	58,918,941	14,939,518	26,250,954	860,115	101,194,543

¹ Book value of real estate for companies' use and other real estate. ² Includes other assets.
³ Includes statistics of loan companies chartered by the Government of Nova Scotia, but inspected by the Dominion Department of Insurance. ⁴ Includes other liabilities to shareholders. ⁵ Includes other liabilities to the public.
⁶ Not shown separately for this year.

3.—Classification of Assets and Liabilities of Trust Companies Chartered by the Dominion Government, as at Dec. 31, 1920-36.

COMPANY FUNDS—ASSETS.

Year.	Loans.			Real Estate.	Government, Municipal and School and other Securities Owned.	Stocks.	Cash on Hand and in Banks.	All other Assets belonging to the Companies.	Total Assets of the Companies.
	On Real Estate, First Liens.	On Real Estate, Second Liens.	On Stocks and Securities.						
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1920....	4,736,064	Nil	512,800	701,564	2,500,942	349,294	576,125	847,463	10,224,252
1921....	4,408,914	Nil	344,302	908,618	2,400,914	253,779	603,618	1,317,785	10,237,930
1922....	5,254,434	Nil	391,475	973,022	1,584,234	264,186	473,687	1,412,205	10,353,243
1923....	5,402,752	Nil	375,129	1,048,682	1,656,304	292,564	481,672	1,573,406	10,830,509
1924....	5,114,753	Nil	446,001	1,551,673	1,598,971	336,818	524,368	2,483,675	12,056,259
1925 ¹ ...	5,143,123	Nil	618,250	1,969,737	2,323,064	432,956	203,431	1,763,355	12,453,916
1926 ¹ ...	5,450,907	Nil	580,128	2,091,322	2,318,344	477,917	705,064	1,571,595	13,195,277
1927 ¹ ...	5,668,574	Nil	977,514	2,140,344	1,993,823	494,083	804,469	1,603,906	13,682,713
1928 ¹ ...	5,651,201	Nil	1,156,698	2,148,354	2,808,630	495,094	917,019	1,589,288	14,766,284
1929 ¹ ...	5,652,084	Nil	1,121,536	1,959,581	3,228,722	425,077	659,466	1,623,031	14,669,497
1930 ¹ ...	5,573,596	Nil	1,183,298	2,049,285	3,176,348	458,392	732,025	1,779,338	14,952,282
1931 ¹ ...	6,034,794	Nil	1,035,169	2,140,792	3,211,183	488,995	551,595	1,996,819	15,459,347
1932 ¹ ...	6,057,336	Nil	628,586	2,306,950	3,105,079	447,940	773,537	2,042,228	15,361,656
1933 ¹ ...	5,413,800	Nil	706,146	2,655,924	3,418,374	451,552	624,363	2,081,259	15,351,418
1934 ¹ ...	5,034,509	Nil	973,532	3,008,327	3,681,872	454,975	667,932	2,080,072	15,901,219
1935 ¹ ...	5,162,632	Nil	666,465	3,163,130	3,591,823	471,431	1,008,869	1,906,543	15,970,893
1936 ¹ ...	5,105,167	Nil	884,014	3,304,918	3,960,552	461,014	914,439	1,744,454	16,374,558

GUARANTEED FUNDS—ASSETS.

Year.	Loans.		Government, Municipal, School and other Securities Owned.	Stocks.	Cash on Hand and in Banks.	All other Assets.	Total Assets held against Guaranteed Funds.
	On Real Estate.	On Stocks and Securities.					
	\$	\$	\$	\$	\$	\$	\$
1920.....	4,247,183	Nil	2,437,106	329,801	853,832	941,588	8,809,510
1921.....	4,159,355	Nil	2,508,197	Nil	550,011	1,556,622	8,774,185
1922.....	5,241,872	Nil	1,823,290	150,951	546,929	1,022,363	8,785,405
1923.....	8,552,388	220,717	1,010,225	137,791	251,508	476,375	10,649,004
1924.....	12,278,138	345,892	989,050	137,791	404,999	152,867	14,308,737
1925 ¹ ...	12,897,930	490,528	1,463,920	85,062	636,526	323,373	15,897,339
1926 ¹ ...	14,005,093	1,334,078	1,488,070	85,062	813,344	253,765	17,979,412
1927 ¹ ...	16,596,737	2,407,158	1,978,136	85,062	1,067,790	329,870	22,464,753
1928 ¹ ...	17,095,284	2,337,415	2,376,726	85,062	1,911,962	299,275	24,105,724
1929 ¹ ...	18,447,949	1,804,750	2,689,069	3,288	1,132,633	387,574	24,465,263
1930 ¹ ...	19,513,691	2,075,322	2,491,089	Nil	1,948,592	380,135	26,408,829
1931 ¹ ...	20,812,176	887,015	2,598,587	18,300	919,982	482,159	25,718,219
1932 ¹ ...	19,336,735	1,480,454	3,286,467	Nil	688,136	431,121	25,222,913
1933 ¹ ...	19,141,920	2,551,966	4,072,131	23,400	1,084,150	523,140	27,396,707
1934 ¹ ...	19,911,247	3,913,332	5,771,085	Nil	1,444,847	610,546	31,651,057
1935 ¹ ...	20,123,641	4,004,017	8,542,061	Nil	1,345,204	742,469	34,757,392
1936.....	20,474,810	5,748,256	7,300,519	Nil	1,199,866	733,156	35,456,607

For footnotes, see end of table, p. 937.

3.—Classification of Assets and Liabilities of Trust Companies Chartered by the Dominion Government, as at Dec. 31, 1920-36—concluded.

LIABILITIES.

Year.	Company Funds.					Guaranteed Funds.		
	Liabilities to Shareholders.				Liabilities to the Public.	Total.	Principal.	Total.
	Capital Paid Up.	Reserve Funds.	Other Liabilities.	Total.	Taxes, Borrowed Money, etc.			
	\$	\$	\$	\$	\$	\$	\$	\$
1920.....	7,465,376	1,851,028	263,716	9,580,120	422,368	10,002,488	8,673,539	8,809,510 ²
1921.....	7,532,777	1,746,815	126,279	9,405,871	501,460	9,907,331	8,424,128	8,549,642 ²
1922.....	7,678,401	1,912,123	46,068	9,636,592	329,827	9,966,419	8,473,720	8,600,588 ²
1923.....	7,772,749	1,908,887	5,674	9,687,310	832,724	10,520,034	10,306,767	10,484,863 ²
1924.....	8,796,479	1,918,567	169,390	10,884,436	766,783	11,651,219	14,027,120	14,160,703 ²
1925 ¹	9,523,618	2,261,890	184,153	11,969,661	232,813	12,202,474	15,897,339	15,897,339
1926 ¹	9,666,449	2,313,464	393,932	12,373,845	580,380	12,954,225	17,979,412	17,979,412
1927 ¹	9,824,031	2,653,673	443,377	12,921,081	571,279	13,492,360	22,464,753	22,464,753
1928 ¹	10,424,249	2,877,766	549,905	13,851,920	741,364	14,593,284	24,105,724	24,105,724
1929 ¹	10,512,879	3,325,020	257,288	14,095,187	325,914	14,421,101	24,465,263	24,465,263
1930 ¹	10,260,025	3,431,538	718,240	14,409,803	294,897	14,704,700	26,408,829	26,408,829
1931 ¹	10,493,608	3,478,889	629,215	14,601,712	464,719	15,066,431	25,718,221	25,718,221
1932 ¹	10,601,822	3,461,760	457,518	14,521,100	368,279	14,889,379	25,222,913	25,222,913
1933 ¹	10,630,336	3,555,585	444,302	14,630,223	206,372	14,836,595	27,396,708	27,396,708
1934 ¹	10,652,618	3,746,260	591,103	14,989,981	246,466	15,236,447	31,651,057	31,651,057
1935 ¹	10,590,333	3,744,068	860,284	15,194,685	121,461	15,316,146	34,757,391	34,757,391
1936 ¹	9,803,722	4,935,216	999,627	15,738,565	139,496	15,878,061	35,456,607	35,456,607

¹ Includes statistics of trust companies chartered by the Government of Nova Scotia but inspected by the Dominion Department of Insurance for the years 1925-33, inclusive, and by the Governments of Nova Scotia and New Brunswick for 1934-36, inclusive. ² Includes interest due and accrued for the years 1920-24.

4.—Amount of Estate, Trust, and Agency Funds of Trust Companies Chartered by the Dominion Government as at Dec. 31, 1920-36.

Year.	Estates, Trust, and Agency Funds.	Year.	Estates, Trust, and Agency Funds.
	\$		\$
1920.....	57,225,303	1929.....	210,005,726
1921.....	79,252,639	1930.....	205,282,593
1922.....	92,449,298	1931.....	215,698,469
1923.....	102,764,835	1932.....	215,702,235
1924.....	123,082,289	1933.....	225,484,151
1925.....	131,420,502	1934.....	230,230,283
1926.....	139,777,235	1935.....	242,594,310
1927.....	161,040,061	1936.....	226,024,454
1928.....	202,655,185		

Section 2.—Small Loans Companies.

There have been incorporated in recent years, by the Parliament of Canada, a number of companies which make small loans, usually not exceeding five hundred dollars each, on the promissory notes of the borrowers and additionally secured in most cases by endorsements or chattel mortgages. While small loans companies may, under their charter powers, make loans on the security of real estate, actually they have made only a very few of such loans. As the business of these companies has now reached considerable proportions the figures showing the same are now separated from those of the loan companies proper and are no longer included in Table 2. The figures relating to the assets and liabilities of the three companies of this class which have commenced operations are shown in summary form below.

5.—Classification of Assets and Liabilities of Small Loans Companies Chartered by the Dominion Government, as at Dec. 31, 1928-36.

ASSETS.

Year.	Loans Receivable.	Cash on Hand and in Banks.	Other Assets.	Total.
	\$	\$	\$	\$
1928.....	138,635	3,597	17,007	159,239
1929.....	434,432	9,621	36,341	480,394
1930.....	598,275	21,814	31,551	651,640
1931.....	777,414	13,020	36,939	827,373
1932.....	644,339	22,125	13,449	679,913
1933.....	1,228,180	327,760	14,019	1,569,959
1934.....	2,353,862	284,761	22,111	2,660,734
1935.....	2,962,580	194,406	30,403	3,187,389
1936.....	4,145,066	214,363	32,961	4,392,390

LIABILITIES.

Year.	Liabilities to Shareholders.					Liabilities to the Public.				
	General Re- serve.	Reserve for Losses.	Capital Paid Up.	Other Lia- bilities.	Total.	Borrowed Money.	Taxes.	Un- earned Income.	Other Lia- bilities.	Total.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1928.....	Nil	1,757	101,000	2,650	105,407	45,000	Nil	6,549	397	51,946
1929.....	Nil	10,075	101,000	1,399	112,474	346,924	40	16,656	1,531	365,151
1930.....	Nil	16,284	141,150	7,418	164,852	450,659	506	22,211	8,843	482,219
1931.....	Nil	36,028	273,150	3,992	313,170	474,659	55	24,532	10,704	509,950
1932.....	Nil	14,722	331,600	1,775	348,097	295,930	Nil	18,596	12,375	326,901
1933.....	Nil	22,945	976,750	10,871	1,010,566	445,382	2,933	96,248	1,142	545,705
1934.....	Nil	65,559	976,750	76,518	1,118,827	1,330,797	13,661	171,817	3,520	1,519,795
1935.....	Nil	91,061	976,750	163,923	1,231,734	1,681,062	17,482	222,643	4,260	1,925,447
1936.....	300,000	146,658	976,750	2,771	1,426,179	2,581,710	33,460	315,678	4,099	2,934,947

Section 3.—Sales of Canadian Bonds.

Interesting aspects of public financing and of the investment of capital in Canadian development since 1911 are illustrated by the sales of Canadian bonds by classes, shown in Table 6. (The figures are reproduced from the *Monetary Times Annual*, 1938.) In the first part of this table, the bonds sold in each year are divided according to whether the financing was for Dominion or Provincial Governments, or for municipalities, railways or other corporations, while in the second part of the table the sales in each year are distributed according to sales in Canada, the United States and the United Kingdom.

The total sales of Canadian bonds naturally reached a very high mark toward the close of the War, owing to the Dominion Government financing required to cover the war expenditures. However, the total sales were greater in 1937 than in any other year, owing largely to the Dominion Government's conversion loans.

Dominion Government financing through bond sales since 1907 may be divided into three periods: the first from 1908 to 1914, when the money was required largely for internal development of the country, public works and Government railways; the second from 1915 to 1919, when war expenditures required very large borrowings; and the third since the War, when the issues have been largely required for refunding former loans at lower interest rates and for expenditures in connection with public works and railways.

Provincial bond issues have been on a much larger scale since the War than formerly, probably due to the development of provincially-owned public utilities and of improved highways. Sales of the bonds of Canadian municipalities, on the other hand, were greater in 1913, toward the end of the 'land boom', than

they have been in any other year, although sales in 1930 almost reached the record. However, allowing for the increased population in cities and towns, there has not been the same marked increase in the average annual sales of municipal bonds in the period since the War, as compared with the period before the War, that is noticeable in the case of provincial bonds.

Sales of corporation bonds, which from 1926 to 1930 had averaged over \$257,000,000 per year, dropped to \$10,550,000 in 1932, and to \$4,385,000 in 1933, this being largely due to the uncertainty of the industrial outlook. Railway bonds also showed a precipitate decline to \$12,500,000 in 1932, and fell to \$1,000,000 in 1933. From 1934 to 1937 substantial recoveries were shown in both classes, the 1936 figures being particularly high.

A very striking change has taken place during the present century in the market in which Canadian bond issues are principally sold. Prior to the War, a great part of the capital required for Canadian development came from the United Kingdom, and the major portion of Canadian bond issues was sold there. The outbreak of war temporarily eliminated that market, and Canadians turned largely to the United States for outside capital. However, the great increase in wealth during and since the War has enabled a much greater proportion of public and industrial financing to be done at home, and beginning with the Victory Loan Campaigns, Canadians not only learned how to invest their money in bonds, but had the necessary funds to invest on a large scale in bond issues. These facts are reflected in the latter part of Table 4 showing that since 1915 a greatly increased proportion of the total issues of Canadian bonds has been sold within Canada. Thus, in 1937, 93 p.c. of all bonds issued were sold in Canada, and 7 p.c. in the United States.

6.—Sales of Canadian Bonds, by Class of Bond and Country of Sale, calendar years 1911-37.

(From the *Monetary Times Annual*.)

NOTE.—Figures for 1904-10, inclusive, will be found at p. 921 of the 1933 Year Book.

CLASSES OF BONDS.

Calendar Year.	Dominion.	Provincial.	Municipal.	Railway.	Corporation.	Total.
	\$	\$	\$	\$	\$	\$
1911.....	1	11,375,000	30,295,838	85,611,265	139,530,885	266,812,988
1912.....	25,000,000	25,639,700	47,159,288	45,014,925	130,124,069	272,937,982
1913.....	34,066,666	36,850,000	110,600,936	65,895,880	126,381,813	373,795,295
1914.....	48,666,666	56,100,000	79,133,996	59,719,000	29,315,405	272,935,067
1915.....	170,000,000	48,105,000	67,393,328	33,675,000	15,933,000	335,106,328
1916.....	175,000,000	33,173,000	93,977,542	22,240,000	32,492,000	356,882,542
1917.....	650,000,000	15,300,000	24,189,079	17,700,000	18,850,000	726,039,079
1918.....	689,016,000	18,605,000	43,570,361	19,600,000	4,565,000	775,356,361
1919.....	753,000,000	52,374,000	26,274,089	35,359,133	42,930,000	909,937,222
1920.....	1	125,993,000	56,371,391	96,500,000	46,050,276	324,914,667
1921.....	1	160,745,400	84,776,931	96,733,000	61,335,825	403,591,156
1922.....	200,000,000	114,918,000	87,088,877	13,505,100	76,885,500	492,397,477
1923.....	200,000,000	106,279,000	83,686,422	27,500,000	97,352,320	514,817,742
1924.....	175,000,000	89,640,000	88,731,612	157,375,000	69,179,180	579,925,792
1925.....	169,333,333	106,970,000	46,218,987	40,925,195	120,085,833	483,533,348
1926.....	105,000,000	76,633,267	65,020,194	34,500,000	250,919,200	532,072,661
1927.....	45,000,000	114,795,500	72,742,114	80,000,000	289,680,067	602,217,681
1928.....	1	92,992,500	27,120,588	48,396,000	285,083,000	453,592,088
1929.....	1	119,960,500	98,667,809	199,200,000	243,330,600	661,158,909
1930.....	140,000,000	160,004,000	109,648,063	137,238,000	220,355,000	767,245,063
1931.....	858,109,300	126,239,205	85,290,066	121,750,000	59,432,000	1,250,820,571
1932.....	226,250,000	128,217,000	95,600,632	12,500,000	10,550,000	473,117,632
1933.....	440,000,000	82,889,000	41,282,513	1,000,000	4,385,000	569,556,513
1934.....	400,000,000	139,868,000	24,690,132	32,500,000	40,902,696	637,960,828
1935.....	739,300,000	123,407,000	44,793,200	48,400,000	60,605,700	1,016,505,900
1936.....	793,000,000	118,735,000	34,356,087	133,000,000	219,983,224 ¹	1,299,074,311 ²
1937.....	883,500,000	174,362,000	52,137,475	65,880,000	91,298,800	1,267,178,275

¹ Not reported for this year.

² Revised since the publication of the 1937 Year Book.

6.—Sales of Canadian Bonds, by Class of Bond and Country of Sale, calendar years 1911-37—concluded.

DISTRIBUTION OF SALES, BY COUNTRIES.

Calendar Year.	Sold in Canada.	Sold in United States.	Sold in United Kingdom.	Total.
	\$	\$	\$	\$
1911.....	44,989,878	17,553,967	204,269,143	266,812,988
1912.....	37,735,182	30,966,406	204,236,394	272,937,982
1913.....	45,603,753	50,720,762	277,470,780	373,795,295
1914.....	32,999,860	53,944,548	185,990,659	272,935,067
1915.....	115,325,214	178,606,114	41,175,000	335,106,328
1916.....	102,938,778	206,943,764	47,000,000	356,882,542
1917.....	546,330,714	174,708,365	5,000,000	726,039,079
1918.....	727,446,361	33,310,000	14,600,000	775,356,361
1919.....	705,385,419	199,446,670	5,105,133	909,937,222
1920.....	101,830,667	223,084,000	Nil	324,914,667
1921.....	213,326,543	178,113,613	12,151,000	403,591,156
1922.....	250,184,984	242,212,493	Nil	492,397,477
1923.....	427,868,742	84,517,000	2,432,000	514,817,742
1924.....	336,758,887	239,544,405	3,622,500	579,925,792
1925.....	271,251,682	181,870,000	30,411,666	483,533,348
1926.....	263,862,718	259,209,943	9,000,000	532,072,661
1927.....	373,637,014	223,714,000	4,866,667	602,217,681
1928.....	278,080,088	159,512,000	16,000,000	453,592,088
1929.....	378,395,909	263,654,000	19,109,000	661,158,909
1930.....	368,868,063	393,632,000	4,745,000	767,245,063
1931.....	1,090,800,571	155,920,000	4,100,000	1,250,820,571
1932.....	377,752,632	81,015,000	14,350,000	473,117,632
1933.....	434,556,513	60,000,000	75,000,000	569,556,513
1934.....	529,630,828	50,000,000	58,330,000	637,960,828
1935.....	853,940,900	162,065,000	500,000	1,016,505,900
1936.....	1,211,824,311 ¹	86,000,000	1,250,000	1,299,074,311 ¹
1937.....	1,178,928,275	88,250,000	Nil	1,267,178,275

¹ Revised since the publication of the 1937 Year Book.

Section 4.—Corporation Dividends.

(From the *Financial Post Business Year Book*.)

The 1937 improvement in Canadian business, as indicated by higher corporate earnings, was reflected in the total annual dividend payments of \$319,804,000, compared with \$260,641,000 in 1936, or a gain of 22.7 p.c. The 1936 dividend disbursements amounted to over double those of 1933, the lowest year of the depression in this respect. Of the total disbursements for the year, mining companies accounted for \$104,600,000 or 32.8 p.c. In Table 7 there is given an eight-year record of aggregate monthly dollar payments and yearly totals for all companies paying dividends in Canada.

7.—Dividend Payments by Canadian Companies, 1930-37.

Month.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
January.....	30,310	27,959	20,401	13,855	14,417	14,785	16,032	22,442
February.....	7,946	5,101	4,095	3,336	3,783	3,496	4,311	5,722
March.....	22,771	24,373 ¹	18,945	16,754	17,267	9,440	19,176	21,500
April.....	32,635	32,058 ¹	21,274	11,602	12,266	14,621	16,161	20,917
May.....	6,581	5,301	4,674	2,931	4,793	4,025	3,332	6,847
June.....	33,847	28,831 ¹	19,343	17,497	41,939	55,804 ¹	61,333	67,642
July.....	29,301	18,702 ¹	16,008	12,672	16,423 ¹	18,679	23,408	31,212
August.....	7,037	4,801 ¹	4,392	3,260	4,464	4,362	3,580	4,585
September.....	23,669	19,187 ¹	16,049	14,271	9,732	12,315	14,610	19,226
October.....	35,886	23,894 ¹	15,920	11,807	13,849	14,801	16,018	19,489
November.....	6,738	4,679 ¹	3,652	3,656	4,188	3,601	4,680	9,046
December.....	50,000 ¹	26,073 ¹	20,209	23,038	42,639	66,700 ¹	78,000	91,176
Totals.....	286,721¹	220,959¹	164,962	134,679	185,760¹	222,629¹	260,641	319,804

¹ Revised since the publication of the 1937 Year Book.

Section 5.—Foreign Exchange.

The Canadian dollar, adopted as our currency in 1857, was equivalent to 15/73 of the pound sterling; in other words, the pound was equal to \$4.866 in Canadian currency at par, and remained so, with minor variations between the import and export gold points representing the cost of shipping gold in either direction, until the outbreak of the Great War. During the first eleven years after Confederation, the Canadian dollar was at a premium in the United States, as the United States dollar was not, after the Civil War, redeemable in gold until 1878. From the latter date, the dollar in the two countries was equivalent at par, and variation was only between the import and export gold points or under \$2 per \$1,000.

At the outbreak of the Great War, both the pound sterling and the Canadian dollar were made inconvertible into gold and fell to a discount in New York, though this discount was 'pegged' or kept at a moderate percentage by sales of United States securities previously held in the United Kingdom, borrowing in the United States, and, after the United States entered the War, by arrangements with the United States Government. After the War, when the exchanges were 'unpegged' about November, 1920, the British pound went as low as \$3.18 and the Canadian dollar as low as 82 cents in New York. In the course of the next year or two, exchange was brought practically back to par, and the United Kingdom resumed gold payments in 1925 and Canada on July 1, 1926. From then until 1928 the exchanges were within the gold points, but in 1929 the Canadian dollar again fell to a moderate discount in New York. The dislocation of exchange resulting from this discount persisted, with the exception of a few months in the latter half of 1930, into 1931. Dollar rates were below the gold export points, however, only for a few scattered intervals. Fluctuations since September, 1931, are dealt with below.

Recent Movements in Canadian Exchange.*—Because of Canada's close financial and commercial relationships with the United Kingdom and the United States, Canadian exchange rates are influenced to a large extent by the London and New York markets. The United Kingdom buys much more from Canada than Canada buys from her, but the reverse is the case as regards the trade between Canada and the United States. The result is that there is a supply of bills on London in excess of the amount needed to meet current obligations in the United Kingdom. By offering these for sale for United States funds in London or New York, a triangular balance is approximated by book transactions and the amount of gold transfers is thereby greatly reduced. The volume of sterling exchange on Canadian account thus passed to the New York market does not greatly influence New York rates of sterling exchange under normal conditions; on the contrary, the volume of the New York-London transactions is sufficient to carry the Canadian rates along with them.

In September, 1931, the equilibrium of international exchange was seriously disturbed. This unfortunate turn of events followed a period of over six years during which the nations of the world had worked steadily towards the stabilization of their currency systems upon a gold basis. Within two months of the time when the United Kingdom found it necessary to suspend free gold shipments, however, only a very small number of countries, including the United States and France, were left with currencies unshaken by preceding abnormal gold movements. The decision of the United Kingdom to go off the gold standard (Sept. 21, 1931) resulted in a sharp depreciation of sterling in New York. Canadian rates depreciated also,

* Revised by Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics.

and fluctuated broadly with sterling until the United States dollar dropped from the ranks of gold standard currencies on Apr. 19, 1933.

Since that time major adjustments have occurred in practically all currencies of the world. The United States dollar was replaced on a gold basis, but was devalued at 59.06 p.c. of its former gold parity ($13\frac{2}{3}$ grains or $\frac{3}{16}$ oz. of gold to the dollar as against 23.22 grains previously) on Jan. 31, 1934, with other countries following suit at irregular intervals until the final break-up of the European gold 'bloc' in September, 1936. These countries, including France, Belgium, and Switzerland, were the last to abandon post-war gold standards established between 1925 and 1927. During 1936, the United States dollar and the Canadian dollar fluctuated narrowly about par, while the pound sterling declined in the latter half of the year until it also approached its old New York and Montreal parity of \$4.866. With the exception of the last three months of the year, when readjustments within the former gold bloc were occurring, 1936 exchange fluctuations were unusually narrow. This was broadly true also for 1937, although there were considerable declines in the French franc, Spanish peseta and Brazilian milreis.

8.—Monthly Averages of Exchange Quotations at Montreal, 1936 and 1937.

NOTE.—The noon rates in Canadian funds upon which these averages are based have been supplied by the Bank of Canada.

Month.	Australia. Pound.		Austria. Schilling.		Belgium. Belga.		Czecho- slovakia. Krone.		Denmark. Krone.		Finland. Markka.	
Old par value.	4.8666		.1407		.1390		.0296		.2680		.0252	
	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
January.....	3.973	3.927	.188	.187	.169	.169	.042	.035	.222	.219	.022	.022
February.....	3.995	3.916	.189	.187	.170	.169	.042	.035	.223	.219	.022	.022
March.....	3.983	3.906	.189	.187	.170	.168	.042	.035	.222	.218	.022	.022
April.....	3.974	3.928	.188	.187	.170	.168	.042	.035	.222	.219	.022	.022
May.....	3.984	3.945	.188	.187	.170	.168	.042	.035	.222	.220	.022	.022
June.....	4.026	3.950	.188	.187	.170	.169	.042	.035	.225	.220	.022	.022
July.....	4.022	3.979	.189	.188	.169	.169	.042	.035	.224	.222	.022	.022
August.....	4.021	3.986	.188	.189	.169	.168	.041	.035	.224	.222	.022	.022
September.....	4.031	3.963	.189	.189	.169	.168	.041	.035	.225	.221	.022	.022
October.....	3.918	3.963	.187	.188	.168	.169	.037	.035	.219	.221	.022	.022
November.....	3.905	3.993	.187	.189	.169	.170	.035	.035	.218	.223	.022	.022
December.....	3.924	3.999	.187	.189	.169	.170	.035	.035	.219	.223	—	.022

Month.	France. Franc.		Germany. Reichs- mark.		Holland. Guilder.		Italy. Lira.		Norway. Krone.		Spain. Peseta.	
Old par value.	.0392		.2382		.4020		.0526		.2680		.1930	
	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
January.....	.066	.047	.404	.402	.682	.548	.080	.053	.249	.247	.137	—
February.....	.067	.047	.406	.402	.685	.547	.080	.053	.251	.246	.138	—
March.....	.066	.046	.405	.402	.684	.547	.080	.053	.250	.245	.138	—
April.....	.066	.045	.404	.402	.682	.547	.079	.053	.250	.247	.137	—
May.....	.066	.045	.404	.401	.678	.548	.079	.053	.250	.248	.137	—
June.....	.066	.044	.404	.401	.679	.550	.079	.053	.253	.248	.137	—
July.....	.066	.038	.404	.403	.681	.552	.079	.053	.253	.250	.137	—
August.....	.066	.038	.402	.402	.679	.552	.079	.053	.253	.250	.137	.064
September.....	.065	.035	.401	.401	.667	.552	.079	.053	.253	.249	.137	.065
October.....	.047	.034	.402	.402	.536	.553	.055	.053	.246	.249	—	.063
November.....	.046	.034	.402	.403	.539	.554	.053	.053	.245	.251	—	.063
December.....	.047	.034	.402	.403	.545	.556	.053	.053	.246	.251	—	.062

8.—Monthly Averages of Exchange Quotations at Montreal, 1936 and 1937—
concluded.

Month.	Sweden. Krona.		Switzer- land. Franc.		Argentina. Peso. ¹ (paper.)		Brazil. Milreis. ¹		Mexico. Peso.		Hong Kong. Dollar.	
	Old par value.		-2680		-4244		-1196		-4985		-3000	
	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
January.....	.256	.253	.327	.229	.272	.302	.055	.061	.278	.278	.322	.306
February.....	.257	.252	.330	.228	.275	.300	.057	.061	.277	.278	.328	.304
March.....	.257	.252	.329	.228	.275	.300	.057	.061	.278	.277	.326	.304
April.....	.256	.253	.327	.228	.276	.303	.057	.063	.279	.277	.326	.305
May.....	.257	.254	.324	.228	.276	.303	.056	.064	.278	.277	.325	.305
June.....	.260	.255	.325	.229	.277	.304	.057	.066	.278	.278	.324	.304
July.....	.259	.256	.328	.230	.273	.302	.058	.067	.278	.278	.322	.304
August.....	.259	.257	.326	.230	.278	.302	.058	.066	.278	.278	.312	.310
September.....	.260	.255	.317	.230	.283	.299	.059	.064	.278	.278	.312	.309
October.....	.253	.255	.230	.230	.277	.298	.059	.058	.277	.277	.310	.310
November.....	.252	.257	.230	.231	.277	.295	.059	.057	.277	.277	.304	.311
December.....	.253	.258	.230	.231	.298	.293	.059	.054	.277	.278	.305	.312

Month.	India. Rupee.		Japan. Yen.		Shanghai. Dollar.		London. Sterling.		New York. Dollar.			
	Old par value.		-3650		-4985		-4167		4.8666		1.00	
	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
January.....			.375	.371	.290	.286	.297	.297	4.966	4.909	1.001	1.000
February.....			.377	.370	.291	.285	.299	.296	4.994	4.895	.999	1.000
March.....			.376	.369	.290	.285	.299	.297	4.978	4.882	1.001	1.000
April.....			.375	.371	.290	.286	.299	.297	4.967	4.910	1.005	.999
May.....			.376	.372	.291	.287	.298	.298	4.980	4.931	1.002	.998
June.....			.380	.373	.295	.288	.300	.297	5.033	4.938	1.003	1.001
July.....			.379	.376	.294	.289	.300	.296	5.027	4.974	1.001	1.001
August.....			.379	.376	.294	.290	.301	.297	5.027	4.983	1.000	1.000
September.....			.381	.374	.295	.289	.300	.297	5.039	4.953	1.000	1.000
October.....			.370	.374	.286	.289	.294	.295	4.897	4.954	1.000	1.000
November.....			.369	.377	.285	.291	.295	.294	4.882	4.991	.999	.999
December.....			.371	.377	.285	.291	.296	.295	4.904	4.999	.999	1.000

¹ Free market rates.

CHAPTER XXIII.—INSURANCE.*

Insurance business is transacted in Canada by companies of the following classes, *viz.*, (1) companies incorporated under the laws of the Dominion of Canada or of the former "Province of Canada", (2) companies incorporated under the laws of the provinces of Canada, and (3) companies incorporated or formed under the laws of British and foreign countries. The word "companies", as here used, includes fraternal benefit societies and exchanges which transact the business of insurance. The Dominion Insurance Acts provide that companies of classes (1) and (3) above may not transact business anywhere in Canada unless registered† by the Dominion, but these Acts also provide that fire insurance on property in Canada may be effected in companies of class (3) even though not registered, if the insurance is effected without solicitation, advertising or the use of the mails, and if an office is not maintained in Canada, though property to be insured may be inspected and losses may be adjusted. Insurance so effected is generally known as 'unlicensed insurance'. Companies of class (2) above may transact business in the province of incorporation, subject to compliance with the laws thereof, or in any other province subject to compliance with the laws thereof, or, on compliance with the Dominion laws, may be granted Dominion registration. Most of these companies limit their business to the province of incorporation or to one or more other provinces; a few only have been granted Dominion registration.

What has been said above implies that jurisdiction concerning insurance Companies and insurance business is divided between the Dominion and the provinces. There have been many references to the courts and appeals to the Privy Council with a view to determining the respective legislative domains, both in respect of insurance legislation specifically and in respect of legislation affecting companies generally, including insurance companies. The latest Privy Council decision was handed down in 1931. It may now be taken as established that the Parliament of Canada may require companies formed or incorporated outside of Canada to obtain Dominion registration and to continue to be so registered as a condition of transacting business in Canada, and these companies may be required to make returns from time to time of their business and doings in Canada and to furnish evidence of their solvency. The powers of the Dominion go much further in reference to companies incorporated by the Parliament of Canada, but include all of the powers which may be exercised over companies formed or incorporated outside of Canada and registered by the Dominion. The Acts passed in 1932,‡ as since amended, implement the powers of the Dominion as determined by the Privy Council decisions.

The Dominion Acts under which companies are registered are administered by the Department of Insurance under the Minister of Finance. The chief officer of the Department of Insurance is the Superintendent of Insurance. The first Superintendent was appointed in 1875 as head of a newly created Insurance Branch of the Department of Finance. In 1910 the Insurance Branch was constituted into a separate Department, the Department of Insurance, under the Minister of Finance.

* The statistics of Fire, Life, and Miscellaneous Insurance have been revised under the direction of G. D. Finlayson, Superintendent of Insurance, and those pertaining to Government Annuities (Section 4) under the direction of W. M. Dickson, Deputy Minister of Labour.

† Prior to 1932, the Dominion Insurance Acts provided for the "licensing" of companies; the Acts passed in 1932 provided for "registration". The change in terminology does not indicate any change in substance.

‡ The Canadian and British Insurance Companies Act, 1932 (22-23 Geo. V, c. 46). The Foreign Insurance Companies Act, 1932 (22-23 Geo. V, c. 47).

Precedent to obtaining first registration, in addition to filing certain documents, including a full and complete financial statement, a company must satisfy the Minister that it is sound and solvent and must make the required initial deposit of securities, varying from \$10,000 to \$100,000, depending on the class of business to be undertaken. Annual returns are required of all registered companies and the Acts require an examination to be made, by the Superintendent or on his behalf, of the books and records of companies with a view to substantiating the accuracy of the statements filed and the soundness of the companies. Should any company show an unsatisfactory financial condition, the Acts require remedial measures to be taken. British and foreign companies are required to maintain in Canada assets sufficient to cover all of their liabilities in Canada, while Canadian companies are required to maintain in Canada all of their assets, except such as it may be necessary to deposit outside of Canada as security for 'out of Canada' business.

The statistics herein given for companies registered by the Dominion are divided into three classes relating to: (1) insurance against fire, (2) life insurance, and (3) miscellaneous insurance, *viz.*, accident, automobile, aviation, burglary, credit, earthquake, explosion, forgery, guarantee, hail, leakage, live-stock, sickness, steam boiler, title, tornado, and weather insurance. These statistics are compiled from the reports of the Department of Insurance; throughout they apply to calendar years.

Since 1915, the Department of Insurance has collected statistics, included herein, of business transacted by provincial companies licensed by the provinces, classified as to: (1) business transacted within the province of incorporation, and (2) business transacted in other provinces.

Returns for unlicensed insurance, above referred to, were required under Sec. 16 of the Special War Revenue Act for taxation purposes, and statistics compiled from these returns were published in the Canada Year Book, prior to the 1933 edition, as Table 8. This section of the Act having been held unconstitutional by the Privy Council decision, Oct. 22, 1931, on an appeal from the Court of the King's Bench of the province of Quebec, the returns for 1930 were incomplete and were not published in the 1933 Year Book. By an amendment to the Act at the 1932 session of Parliament, a section analogous to Sec. 16 was enacted, applicable to unlicensed insurance and the information was, therefore, revived in the 1934-35 edition. This information is, however, no longer required from such companies and has been again dropped.

Statistics of Dominion Government annuities are given at the end of this chapter. The Department of Labour administers the Acts under which these annuities are sold.

Section 1.—Fire Insurance.

Fire insurance in Canada began with the establishment by British fire insurance companies of agencies, usually situated in the seaports and operated by local merchants. The oldest existing agency of a British company is that of the Phoenix Fire Office of London, now the Phoenix Assurance Company, Ltd., which commenced business in Montreal in 1804. On account of the growth of the insurance business of these early British companies, branch offices were established and local managers were appointed, charged with directing the companies' affairs in Canada.

The Halifax Fire Insurance Co. is the first purely Canadian company of which any record is available. Founded in 1809 as the Nova Scotia Fire Association,

it was chartered in 1819 and operated in the province of Nova Scotia until 1919 when it was granted a Dominion licence. Among the other pioneer fire insurance companies still in operation, mention may be made of the following: the Quebec Fire Assurance Co., which commenced business in 1818 and was largely confined in ownership and operations to Quebec province; the British America Assurance Co., incorporated in 1833, the oldest company in Ontario; the Western Assurance Co., organized in 1851, and now, after a rapid and steady growth, one of the largest companies of its kind on the continent; two United States companies, the Aetna Insurance Co., Hartford, Conn., and the Hartford Fire Insurance Co., which commenced business in Canada in 1821 and 1836, respectively.

The report of the Superintendent of Insurance for the year ended Dec. 31, 1936, shows that at that date there were 269 fire insurance companies doing business in Canada under Dominion registration; of these 50 were Canadian, 68 were British and 151 were foreign companies. In 1875, the first year for which authentic records were collected by the Department of Insurance, 27 companies operated in Canada—11 Canadian, 13 British and 3 United States. The proportionate increase in the number of British and foreign companies from 59 p.c. to over 81 p.c. of the total number is a very marked point of difference between the fire and life insurance businesses in Canada, the latter being carried on very largely by Canadian companies.

Although in its early days the Dominion did not prove a very lucrative field for fire insurance companies, the great advance in building construction and the wide use of improved fire appliances and safety devices have materially reduced the danger of serious conflagrations and have placed the risks assumed by companies in Canada on an equality with those of other countries.

A feature of the fire insurance business, besides the large percentage of British and foreign companies, is the continued increase in the number of companies which are operating on the mutual or reciprocal plan. These companies, in which all profits or losses are directly received or paid by the policyholders, are making themselves felt as competitive factors in the fire insurance business.

Statistics of Fire Insurance.—Statistical tables of fire insurance in Canada, illustrative of the progress of total business since 1869, and of the operations of individual companies for the year 1936, follow. The net amount of fire insurance in force on Dec. 31, 1936, with companies holding Dominion licences, was \$9,248,273,-260,* while the net amount in force with provincial companies on the same date was \$1,184,852,046. Thus the grand total fire insurance in force on Dec. 31, 1936, with Dominion and provincial companies was \$10,433,125,306.

Table 1 shows figures of the growth since 1869 of companies registered by the Dominion, the relationship between losses paid and net premiums written, and the variation in the cost per \$100 of insurance. It will be observed that the cost of insurance reached a maximum in 1904 and 1905; there has since been a steady decrease with the exception of the years 1921, 1922, and 1924, when temporary reversals of the downward swing were in evidence. It is noteworthy that the cost of fire insurance has decreased by 56.88 p.c. since 1905. Table 2 shows the business done in Canada by individual companies during the year 1936, while in Tables 3, 4, and 5 are given figures of the assets, liabilities, incomes and expenditures during the years 1932 to 1936, classified by nationality of companies. A further summary of

* According to preliminary figures, fire insurance in force in companies registered by the Dominion increased by \$525,326,633 in 1937. The large increases of later years are due, in part, to Dominion registration of certain provincially registered companies.

business is given by provinces in Table 6 for the years 1935 and 1936, showing premiums and losses classified by provinces and by nationality of companies. Further, a summary of the business transacted by both Dominion and provincial licensees is given in Table 7.

1.—Summary Statistics of Fire Insurance by Companies Operating under Dominion Registration, calendar years 1869-1937.

Year.	Amount in Force at End of Year.	Net Premiums Received during Year.	Losses Paid during Year.	Percent- age of Losses to Pre- miums.	Gross Amount of Risks Taken during Year.	Premiums Charged Thereon.	Average Cost per \$100 of Insurance.
	\$	\$	\$	p.c.	\$	\$	\$
1869	188,359,809	1,785,539	1,027,720	57.56	171,540,475		
1870	191,549,586	1,916,779	1,624,837	84.77	199,102,070		
1871	228,453,784	2,321,716	1,549,199	66.73	244,437,172		
1872	251,722,940	2,628,710	1,909,975	72.66	277,387,271		
1873	278,754,835	2,968,416	1,682,184	55.67	271,095,928	1	1
1874	306,844,219	3,522,303	1,926,159	54.68	329,178,974		
1875	364,421,029	3,594,764	2,563,531	71.31	331,098,419		
1876	404,608,180	3,708,006	2,867,295	77.33	401,148,747		
1877	420,342,681	3,764,005	8,490,919	225.58	385,736,566	3,817,360	0.99
1878	409,899,701	3,368,430	1,822,674	54.11	359,847,757	3,723,530	1.35
1879	407,357,985	3,227,488	2,145,198	66.47	360,704,419	3,608,501	1.00
1880	411,563,271	3,479,577	1,666,578	47.90	384,051,861	3,958,437	1.03
1881	462,210,968	3,827,116	3,169,824	82.83	441,416,238	4,414,728	1.00
1882	526,856,478	4,229,706	2,664,986	63.01	478,044,416	4,850,717	1.01
1883	572,264,041	4,624,741	2,920,228	63.14	513,580,302	5,379,950	1.05
1884	605,507,789	4,980,128	3,245,323	65.16	513,933,378	5,934,773	1.15
1885	611,794,479	4,852,460	2,679,287	55.22	486,002,908	5,684,758	1.17
1886	586,773,022	4,932,335	3,301,388	66.93	505,752,907	5,854,172	1.16
1887	634,767,337	5,244,502	3,403,514	64.90	532,757,088	6,145,188	1.15
1888	650,735,059	5,437,263	3,073,822	56.53	541,580,007	6,390,296	1.18
1889	684,538,378	5,588,016	2,876,211	51.47	572,782,104	6,628,336	1.16
1890	720,679,621	5,836,071	3,266,567	55.97	620,723,945	7,019,319	1.13
1891	759,602,191	6,168,716	3,905,697	63.31	623,418,422	7,248,495	1.16
1892	821,410,072	6,512,327	4,377,270	67.22	687,175,688	8,086,503	1.13
1893	814,687,057	6,793,595	5,052,690	74.37	687,604,239	8,115,594	1.18
1894	836,067,202	6,711,369	4,589,363	68.38	653,589,428	8,158,033	1.25
1895	837,872,864	6,943,382	4,993,750	71.92	667,639,048	8,243,605	1.23
1896	845,574,352	7,075,850	4,173,501	58.98	669,288,650	8,397,876	1.25
1897	868,522,217	7,157,661	4,701,833	65.69	663,698,309	8,304,227	1.25
1898	895,394,107	7,350,131	4,784,487	65.09	681,160,689	8,564,124	1.26
1899	936,869,668	7,910,492	5,182,038	65.51	756,257,098	9,316,685	1.23
1900	992,332,360	8,331,948	7,774,293	93.31	803,428,654	10,031,735	1.25
1901	1,038,687,619	9,650,348	6,774,956	70.20	821,522,854	11,688,958	1.42
1902	1,075,263,536	10,577,084	4,152,289	39.26	892,049,886	13,087,251	1.47
1903	1,140,453,716	11,384,762	5,870,716	51.57	933,274,764	14,038,152	1.50
1904	1,215,013,931	13,169,882	14,099,534	107.06	1,002,305,105	16,006,969	1.60
1905	1,318,146,495	14,285,671	6,000,519	42.00	1,140,095,372	18,262,037	1.60
1906	1,443,902,244	14,687,963	6,584,291	44.83	1,210,099,865	18,554,730	1.53
1907	1,614,703,536	16,114,475	8,445,041	52.41	1,364,204,991	20,492,863	1.50
1908	1,700,708,263	17,027,265	10,279,455	60.37	1,466,294,021	21,968,432	1.50
1909	1,863,276,504	17,049,464	8,646,826	50.72	1,579,975,867	22,293,633	1.41
1910	2,034,276,740	18,725,531	10,292,393	54.96	1,817,055,685	24,684,296	1.36
1911	2,279,868,346	20,575,255	10,936,948	53.16	1,987,640,591	26,867,170	1.35
1912	2,684,355,895	23,194,518	12,119,581	52.25	2,374,161,732	30,639,867	1.29
1913	3,151,930,389	25,745,947	14,003,759	54.39	2,925,200,553	36,032,461	1.21
1914	3,456,019,009	27,499,153	15,347,284	55.81	3,104,101,568	36,185,927	1.17
1915	3,531,620,802	26,474,833	14,161,949	53.49	3,111,552,903	36,048,345	1.16

¹ Figures from 1869-76 not available.

1.—Summary Statistics of Fire Insurance by Companies Operating under Dominion Registration, calendar years 1869-1937—concluded.

Year.	Amount in Force at End of Year.	Net Premiums Received during Year.	Losses Paid during Year.	Percent- age of Losses to Pre- miums.	Gross Amount of Risks Taken during Year.	Premiums Charged Thereon.	Average Cost per \$100 of Insurance.
	\$	\$	\$	p.c.	\$	\$	\$
1916.....	3,720,058,236	27,783,852	15,114,063	54.40	3,418,238,860	37,231,691	1.09
1917.....	3,986,197,514	31,246,530	16,379,101	52.42	4,049,059,999	43,515,822	1.07
1918.....	4,523,514,841	35,954,405	19,359,352	53.84	4,606,035,056	48,770,112	1.06
1919.....	4,923,024,381	40,031,474	16,679,355	41.67	5,423,569,961	57,577,632	1.06
1920.....	5,969,872,278	50,527,937	21,935,387	43.41	6,790,670,610	71,143,917	1.05
1921.....	6,020,513,832	47,312,564 ¹	27,572,560 ¹	58.28	6,139,531,168	68,161,786	1.11
1922.....	6,348,637,436	48,168,310 ¹	32,848,020 ¹	68.19	6,471,133,294	68,347,294	1.06
1923.....	6,806,937,041	51,169,250 ¹	32,142,494 ¹	62.82	7,311,835,110	73,037,471	1.00
1924.....	7,224,475,267	49,833,718 ¹	29,186,904 ¹	58.57	6,987,536,461	71,146,802	1.02
1925.....	7,583,297,899	51,040,075 ¹	26,943,089 ¹	52.79	7,646,026,535	74,679,130	0.98
1926.....	8,051,444,136	52,595,923 ¹	25,705,975 ¹	48.87	8,716,166,834	81,104,612	0.93
1927.....	8,287,732,966	51,375,637 ¹	20,831,931 ¹	40.55	8,531,139,424	76,423,855	0.90
1928.....	8,761,579,512	54,826,851 ¹	25,544,664 ¹	46.57	9,187,224,958	80,413,215	0.88
1929.....	9,431,169,594	56,112,457 ¹	30,209,839 ¹	53.84	10,791,096,165	87,317,411	0.81
1930.....	9,672,996,973	52,646,520 ¹	30,427,968 ¹	57.71	10,311,193,608	82,700,147	0.80
1931.....	9,544,641,293	50,342,669 ¹	29,938,409 ¹	59.47	10,789,737,477	86,741,056	0.80
1932.....	9,301,747,991	46,911,929 ¹	30,068,923 ¹	64.10	10,339,649,769	81,823,235	0.79
1933.....	9,008,262,736	41,573,986 ¹	21,655,460 ¹	52.09	10,644,787,101	78,980,010	0.74
1934.....	8,804,840,676	41,468,119 ¹	16,968,030 ¹	40.92	9,506,703,020	68,793,705	0.72
1935.....	8,782,698,099	40,884,876 ¹	14,821,465 ¹	36.25	9,641,773,674	67,596,146	0.70
1936.....	9,248,273,260	40,218,296 ¹	14,072,237 ¹	34.99	9,642,269,141	66,831,039	0.69
1937.....	9,773,599,893	42,475,604 ¹	14,811,055 ¹	34.89	10,415,441,962	71,908,789	0.69

¹ These figures show premiums written and losses incurred.
revision.

² Figures for 1937 are subject to

2.—Fire Insurance Business Transacted in Canada, by Companies Operating Under Dominion Registration, 1936.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged Thereon.	Rate of Pre- miums per cent of Risks.	Net Premiums Written.	Net Losses Incurred, including Adjustment Expenses.	Percent- age of Losses Incurred to Pre- miums Written.
	\$	\$	p.c.	\$	\$	p.c.
Canadian Companies.						
Acadia.....	54,845,698	451,457	0.82	186,606	60,320	32.32
Antigonish.....	304,550	3,396	1.12	3,396	2,881	84.84
Beaver.....	8,771,796	68,539	0.78	21,702	7,889	36.35
British America.....	62,764,440	479,143	0.76	320,935	102,442	31.92
British Canadian.....	8,957,671	94,552	1.06	62,111	19,201	30.91
British Empire.....	11,050,260	116,879	1.06	79,473	26,182	32.94
British Northwestern.....	53,746,798	263,139	0.49	129,946	45,280	34.85
Canada Accident.....	44,252,042	387,345	0.88	153,758	55,493	36.09
Canada Security.....	36,887,263	261,839	0.71	131,713	41,584	31.57
Canadian Fire.....	51,201,842	395,256	0.77	296,719	74,493	25.21
Canadian General.....	58,416,599	408,624	0.70	157,170	52,121	33.16
Canadian Indemnity.....	18,027,118	139,911	0.78	106,529	29,300	27.50
Canadian Surety.....	16,022,426	118,573	0.74	52,918	13,527	25.56
Casualty.....	9,278,181	69,136	0.75	37,783	5,380	14.24
Commerce Mutual.....	26,654,953	670,977	2.52	366,331	107,194	29.26
Consolidated.....	18,005,529	156,022	0.87	95,097	53,302	56.05
Cumberland.....	251,350	3,142	1.25	3,117	4,736	151.95
Dominion Fire.....	55,454,165	456,499	0.82	282,415	75,737	26.82
Dominion of Canada General	46,839,766	319,023	0.68	176,173	42,315	24.02
Economical Mutual.....	45,133,862	401,350	0.89	308,113	109,940	35.68
Ensign.....	11,885,575	100,762	0.85	64,519	21,742	33.70
Fire Insurance of Canada...	60,439,559	569,420	0.94	280,232	116,582	41.60
General Accident of Canada	23,821,126	152,554	0.64	74,911	22,023	29.40
Globe Indemnity.....	58,237,130	343,253	0.59	118,489	43,824	36.99
Grain.....	60,461,631	565,577	0.94	508,562	107,749	21.19
Guardian Insurance.....	31,748,173	192,374	0.61	93,232	31,821	34.13
Halifax.....	61,101,164	441,433	0.72	241,233	74,749	30.99
Hudson Bay.....	85,154,955	410,627	0.48	148,264	54,836	36.99
Imperial Guarantee.....	12,782,785	69,709	0.55	39,664	12,968	32.69

2.—Fire Insurance Business Transacted in Canada, by Companies Operating under Dominion Registration, 1936—continued.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged Thereon.	Rate of Premiums per cent of Risks.	Net Premiums Written.	Net Losses Incurred, including Adjustment Expenses.	Percentage of Losses Incurred to Premiums Written.
	\$	\$	p.c.	\$	\$	p.c.
Canadian Companies—concluded.						
Imperial Insurance.....	26,501,828	197,889	0.75	101,925	27,867	27.34
Kings Mutual.....	3,535,220	42,944	1.21	42,146	26,967	63.99
Liverpool-Manitoba.....	78,413,251	511,643	0.65	189,583	70,118	36.99
London and Lancashire Guarantee.....	9,889,107	74,970	0.76	32,695	10,525	32.19
London-Canada.....	26,405,478	196,294	0.74	109,419	57,665	52.70
Mercantile.....	42,541,179	234,674	0.55	117,081	44,064	37.64
National-Liverpool.....	35,707,125	253,058	0.71	94,791	35,059	36.99
North Empire.....	29,435,490	254,523	0.86	124,404	40,213	32.32
North West.....	20,969,685	164,507	0.78	64,066	23,122	36.09
Occidental.....	34,893,902	229,156	0.66	116,613	44,169	37.88
Pacific Coast.....	34,603,979	211,168	0.61	94,442	34,360	36.38
Pictou County.....	1,233,250	9,418	0.76	9,398	1,397	14.86
Pioneer.....	25,630,128	207,153	0.81	83,399	30,845	36.99
Portage la Prairie.....	33,628,899	518,817	1.54	218,670	173,128	79.17
Quebec.....	36,978,229	270,171	0.73	120,233	41,800	34.77
Reliance.....	20,106,137	125,661	0.62	65,691	16,084	24.48
Scottish Canadian.....	16,649,821	116,151	0.70	64,190	32,637	50.84
Security National.....	8,003,315	68,062	0.85	29,917	7,967	26.63
Wapiti.....	4,581,433	84,219	1.84	77,813	23,244	29.87
Wawanesa.....	170,887,244	1,665,302	0.97	1,206,973	438,955	36.37
Western.....	100,300,866	663,034	0.66	421,000	137,883	32.75
Totals, Canadian.....	1,793,393,973	14,209,328	0.79	7,925,560	2,733,680	34.49
British Companies.						
Alliance.....	75,701,992	398,287	0.53	344,655	99,484	28.86
Anglo-Scottish.....	30,743,195	208,098	0.68	121,487	37,985	31.27
Atlas.....	92,828,287	579,433	0.62	446,275	147,784	33.12
Bankers and Traders.....	3,906,283	40,890	1.05	35,242	4,814	13.66
British and European.....	11,655,008	114,235	0.98	38,439	13,873	36.09
British Crown.....	59,691,431	338,891	0.57	248,123	92,302	37.20
British General.....	25,374,634	192,196	0.76	64,066	23,122	36.09
British Law.....	34,099,362	134,151	0.39	66,941	26,820	40.07
British Oak.....	13,718,608	124,106	0.90	98,301	47,200	48.02
British Traders.....	64,535,433	331,734	0.51	155,963	41,996	26.93
Caledonian.....	43,829,339	337,675	0.77	268,398	125,245	46.66
Car and General.....	32,316,460	211,605	0.65	135,772	30,906	22.76
Central.....	31,576,373	258,722	0.82	94,792	35,059	36.99
Century Insurance.....	61,396,642	352,252	0.57	177,886	76,920	43.24
China.....	5,334,993	34,353	0.64	22,280	5,999	26.93
Commercial Union Assurance.....	215,031,918	1,659,585	0.77	612,383	264,539	43.20
Cornhill.....	36,308,048	231,456	0.64	193,240	80,033	41.42
Eagle Star.....	49,269,391	359,073	0.73	291,747	91,445	31.34
Employers' Liability.....	129,043,503	724,858	0.56	517,779	169,213	32.68
Essex and Suffolk.....	23,375,061	166,461	0.71	58,772	19,453	33.10
Excess.....	6,185,273	51,261	0.83	43,339	4,571	10.55
General Accident Fire.....	99,550,707	416,937	0.42	298,599	123,196	41.26
Guardian Assurance.....	113,329,972	876,103	0.77	671,611	265,969	39.60
Guildhall.....	33,649,542	154,465	0.46	71,859	23,106	32.16
Indemnity Marine.....	Nil	-	-	Nil	Nil	-
Law, Union and Rock.....	52,901,291	317,513	0.60	263,053	106,416	40.45
Legal and General.....	37,614,402	222,470	0.59	151,376	77,975	51.51
Liverpool and London and Globe.....	232,098,478	1,645,744	0.71	849,411	329,039	38.74
Local Government.....	11,080,396	90,070	0.81	52,763	16,904	32.04
London and County.....	13,137,249	117,338	0.89	92,585	29,835	32.22
London and Lancashire.....	200,109,618	1,181,198	0.59	898,825	489,414	54.45
London and Provincial.....	6,459,807	58,148	0.90	46,793	28,951	61.87
London and Scottish.....	15,457,603	109,430	0.71	74,522	26,858	36.04
London Assurance.....	94,754,200	497,760	0.53	344,265	100,472	29.18
London Guarantee.....	38,320,763	337,974	0.88	124,404	40,213	32.32
Marine.....	Nil	-	-	Nil	Nil	-
Merchants Marine.....	35,377,680	199,530	0.56	162,705	42,306	26.00
Motor Union.....	12,538,266	71,280	0.57	51,347	7,276	14.17
National Provincial.....	22,165,915	142,645	0.64	99,103	37,584	37.92

2.—Fire Insurance Business Transacted in Canada, by Companies Operating under Dominion Registration, 1936—continued.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged Thereon.	Rate of Premiums per cent of Risks.	Net Premiums Written.	Net Losses Incurred, including Adjustment Expenses.	Percentage of Losses Incurred to Premiums Written.
	\$	\$	p.c.	\$	\$	p.c.
British Companies—concluded.						
North British.....	151,493,525	933,901	0.62	634,515	202,964	31.99
Northern Assurance.....	78,041,746	505,327	0.65	378,828	140,014	36.96
Norwich Union.....	134,473,064	938,816	0.70	702,984	271,868	38.67
Ocean Accident.....	43,487,282	295,659	0.68	212,322	86,325	40.66
Palatine.....	47,451,084	404,071	0.85	179,384	64,742	36.09
Patriotic.....	25,347,196	153,310	0.60	106,144	31,394	29.58
Pearl.....	50,738,746	325,301	0.64	274,246	82,976	30.26
Phoenix of London.....	290,196,995	1,932,192	0.67	798,473	274,328	34.36
Planet.....	28,590,582	137,321	0.48	73,452	31,574	42.99
Provincial.....	35,507,260	330,283	0.93	276,087	116,037	42.03
Prudential.....	190,484,472	863,058	0.45	520,089	200,612	38.57
Queensland.....	1,307,621	12,406	0.95	10,245	2,802	27.35
Railway Passengers.....	11,198,257	66,764	0.60	41,999	7,029	16.74
Royal Exchange.....	107,151,210	568,729	0.54	405,995	132,543	32.65
Royal Insurance.....	493,974,065	3,397,061	0.69	1,301,716	462,081	35.50
Royal Scottish.....	22,799,882	120,893	0.53	81,530	29,665	36.39
Scottish Metropolitan.....	23,368,807	167,014	0.71	114,675	32,402	28.26
Scottish Union.....	44,062,541	342,585	0.78	288,823	125,354	43.40
Sea.....	24,093,313	136,490	0.57	113,410	33,264	29.33
Southern.....	8,784,237	56,161	0.64	35,052	11,512	32.84
State Assurance.....	12,020,335	86,181	0.72	61,742	19,277	31.22
Sun Insurance.....	156,049,733	840,979	0.54	610,219	228,008	37.36
Union Assurance.....	74,637,963	586,296	0.79	256,263	92,489	36.09
Union of Canton.....	72,437,082	430,818	0.59	267,364	71,154	26.61
Union Marine.....	30,142,055	254,925	0.85	108,205	35,801	33.09
United British.....	9,757,909	70,643	0.72	52,550	22,052	41.96
Westminster.....	14,110,216	91,462	0.65	Nil	Nil	-
World Marine.....	15,975,425	69,084	0.43	45,078	42,214	93.64
Yorkshire.....	29,761,311	315,485	1.06	255,070	81,713	32.04
Totals, British.....	4,291,911,017	27,721,202	0.65	16,495,561	6,116,471	37.08
Foreign Companies.						
Ætna.....	71,905,655	412,765	0.57	346,927	111,324	32.09
Affiliated Underwriters.....	20,424,391	125,922	0.62	115,027	94,193	81.89
Agricultural.....	14,786,701	84,783	0.57	48,750	15,655	32.11
Alliance Insurance.....	71,342,355	254,918	0.36	156,880	60,471	38.55
American Alliance.....	14,751,933	114,475	0.77	47,126	23,188	49.20
American Central.....	16,222,024	144,146	0.89	64,066	23,122	36.09
American Equitable.....	33,792,540	250,192	0.74	210,047	159,378	75.88
American Exchange.....	3,353,510	11,716	0.35	10,827	135	1.24
American Home Fire.....	21,942,885	263,104	1.20	138,837	74,790	53.87
American Insurance.....	32,864,676	136,652	0.42	82,856	21,192	25.58
American Mutual.....	10,653,188	61,948	0.58	11,111	6,428	57.85
American Reserve.....	31,860,917	180,471	0.57	152,817	60,374	39.51
Arkwright Mutual.....	28,435,873	175,201	0.62	41,808	24,148	57.76
Automobile.....	394,361	3,255	0.83	2,788	101	3.63
Baloise.....	15,591,435	181,934	1.17	123,324	60,271	48.87
Baltimore American.....	332,555	6,039	1.82	Nil	Nil	-
Bankers and Shippers.....	12,622,300	93,804	0.74	90,082	34,604	38.41
Bee Fire.....	36,075,944	207,456	0.58	161,233	81,762	50.71
Blackstone Mutual.....	17,521,726	107,733	0.61	25,249	12,431	49.23
Boston.....	14,106,257	73,900	0.52	52,504	20,902	39.81
Boston Manufacturers.....	35,063,594	214,113	0.61	45,212	30,527	67.52
Caledonian-American.....	9,326,491	84,192	0.90	51,593	17,543	34.00
California.....	14,965,253	107,203	0.72	38,439	13,873	36.09
Camden.....	19,767,265	97,779	0.49	69,913	21,380	30.58
Cannors Exchange.....	12,201,015	97,631	0.80	40,224	12,952	32.20
Central Manufacturers.....	10,315,695	88,579	0.86	70,719	25,521	36.09
Central Union.....	5,780,762	45,656	0.79	11,437	3,481	30.44
Citizens.....	15,341,081	61,743	0.40	21,732	6,790	31.25
City of New York.....	8,645,058	73,334	0.85	Nil	Nil	-
Columbia.....	24,973,205	191,397	0.77	62,202	20,107	32.32
Commerce Insurance.....	3,220,455	9,326	0.29	6,372	3,671	57.61
Commercial Union of N.Y.....	2,253,202	21,298	0.95	12,813	4,625	36.09
Connecticut.....	42,211,086	245,558	0.58	139,859	45,719	32.69
Continental.....	52,376,802	362,366	0.69	266,688	94,080	35.28

2.—Fire Insurance Business Transacted in Canada, by Companies Operating under Dominion Registration, 1936—continued.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged Thereon.	Rate of Premiums per cent of Risks.	Net Premiums Written.	Net Losses Incurred, including Adjustment Expenses.	Percentage of Losses Incurred to Premiums Written.
	\$	\$	p.c.	\$	\$	p.c.
Foreign Companies—continued.						
Cotton and Woollen Manufacturers Mutual.....	6,660,005	43,239	0.65	9,513	4,601	48.27
County Fire.....	33,096,007	244,486	0.74	9,425	4,638	49.20
Eagle Fire.....	Nil	—	—	Nil	Nil	—
Enterprise Mutual.....	10,653,188	61,948	0.58	11,111	6,428	57.85
Equitable Fire and Marine..	17,432,824	117,848	0.68	27,972	9,144	32.69
Eureka Security.....	3,262,563	16,626	0.51	9,058	352	3.89
Fall River Manufacturers Mutual.....	10,117,146	61,710	0.61	3,156	9,210	291.82
Federal.....	Nil	—	—	Nil	Nil	—
Fidelity-Phenix.....	49,013,910	358,405	0.73	280,813	91,689	32.65
Fire Association.....	30,674,120	179,298	0.58	126,277	63,993	50.68
Firemans Fund.....	45,718,864	204,604	0.45	149,536	42,722	28.57
Firemens Insurance.....	21,289,687	193,975	0.91	150,445	51,658	34.34
Firemens Mutual.....	32,769,294	210,687	0.64	77,082	9,805	12.72
Fireproof Sprinklered.....	6,829,250	8,645	0.13	8,484	724	8.53
First American.....	7,169,669	58,277	0.81	44,431	16,543	37.23
First National.....	13,932,100	106,401	0.76	Nil	Nil	—
La Foncière.....	26,220,059	316,043	1.21	222,202	74,835	33.68
Franklin.....	19,079,293	127,107	0.67	Nil	Nil	—
General Fire of Paris.....	37,862,832	262,533	0.69	130,103	51,556	39.63
General Insurance of America.....	55,242,463	421,298	0.76	265,264	141,274	53.26
Girard.....	4,279,373	36,659	0.86	30,016	11,501	38.32
Glens Falls.....	28,844,577	145,029	0.50	91,013	30,404	33.41
Granite State.....	8,910,002	51,096	0.57	32,402	21,850	67.43
Great American.....	91,182,636	575,615	0.63	421,940	211,014	50.01
Hanover.....	19,466,376	123,462	0.63	82,912	49,507	59.71
Hardware Dealers.....	20,696,525	261,079	1.26	210,668	54,783	25.00
Hardware Mutual.....	21,950,918	272,652	1.24	228,633	59,114	25.86
Hartford Fire.....	105,928,409	641,725	0.61	530,320	192,327	36.27
Home Fire and Marine.....	14,435,721	74,194	0.51	58,753	20,657	35.16
Home Insurance.....	168,964,276	1,465,710	0.87	1,177,226	479,283	40.71
Homestead.....	6,683,121	74,150	1.11	Nil	Nil	—
Hope Mutual.....	7,951,986	49,681	0.62	11,056	4,701	42.63
Imperial Assurance.....	34,458,551	243,818	0.71	124,404	40,213	32.32
Indiana Lumbermens.....	8,735,401	84,850	0.97	59,051	27,085	45.87
Individual Underwriters.....	38,355,006	81,819	0.21	75,625	20,086	26.56
Industrial Mutual.....	3,330,002	21,620	0.65	4,756	2,301	48.38
Insurance Co. of North America.....	140,124,835	665,489	0.47	469,422	172,189	36.68
Insurance Co. of State of Pennsylvania.....	Nil	—	—	—13	155	—
Inter-Insurers Exchange.....	425,000	1,815	0.43	982	39	4.00
International.....	6,493,863	74,686	1.15	47,644	30,802	64.65
Lumbermens Insurance.....	10,505,969	76,006	0.72	64,911	37,097	57.15
Lumbermen Mutual Insurance.....	4,580,344	55,194	1.21	43,692	17,671	40.44
Lumbermens Underwriting Alliance.....	23,462,410	293,423	1.25	217,351	151,662	69.78
Lumber Mutual.....	9,349,882	126,280	1.35	86,180	46,331	53.76
Manufacturers Mutual.....	17,755,312	103,247	0.58	18,519	10,713	57.85
Manufacturing Lumbermens Maryland Insurance.....	Nil	—	—	Nil	Nil	—
Mechanics Mutual.....	11,170,514	86,798	0.78	65,430	31,621	48.33
Mechanics Mutual.....	10,653,188	61,948	0.58	11,111	6,428	57.85
Merchants and Manufacturers.....	29,038,500	247,199	0.85	193,801	67,132	34.64
Merchants Fire.....	28,157,039	208,806	0.74	183,639	53,776	29.30
Merchants Mutual Fire.....	10,255,132	63,477	0.62	14,607	6,804	46.58
Mercury.....	14,228,534	97,531	0.69	74,896	15,287	20.41
Metropolitan Fire.....	12,320,762	87,690	0.71	69,053	21,060	30.50
Metropolitan Inter-Insurers.....	18,953,926	48,813	0.26	45,014	19,969	44.36
Michigan Fire.....	11,681,552	91,561	0.78	26,657	11,238	42.16
Millers National.....	23,461,105	176,444	0.75	125,903	51,045	40.54
Mill Owners Mutual of Chicago.....	3,008,582	20,455	0.68	5,664	1,302	22.98
Mill Owners Mutual of Iowa.....	27,343,216	364,517	1.33	248,495	49,133	19.77
Minnesota Implement.....	24,133,288	289,843	1.20	224,616	59,472	26.48
National-Ben Franklin.....	19,536,072	181,460	0.93	144,815	52,354	36.15

2.—Fire Insurance Business Transacted in Canada, by Companies Operating under Dominion Registration, 1936—concluded.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged Thereon.	Rate of Premiums per cent of Risks.	Net Premiums Written.	Net Losses Incurred, including Adjustment Expenses.	Percentage of Losses Incurred to Premiums Written.
	\$	\$	p.c.	\$	\$	p.c.
Foreign Companies—concluded.						
National Fire of Hartford...	55,521,341	332,726	0.60	251,760	91,651	36.40
Nationale Fire of Paris.....	48,199,026	492,629	1.02	427,740	152,751	35.71
National Liberty.....	10,500,611	93,332	0.89	Nil	Nil	-
National Security.....	683,181	6,232	0.91	5,491	83	1.52
National Union.....	23,072,981	152,426	0.66	123,530	51,280	41.51
Newark.....	26,520,208	192,697	0.73	102,324	37,700	36.84
New Brunswick.....	8,014,738	62,437	0.78	Nil	Nil	-
New Hampshire.....	26,498,650	173,131	0.65	122,120	53,187	43.55
New Jersey.....	11,081,100	83,751	0.76	75,096	24,845	33.08
New York Fire.....	25,083,300	228,882	0.91	188,727	85,839	45.48
New York Reciprocal.....	32,080,383	59,854	0.19	56,318	6,359	11.29
New York Underwriters.....	38,902,790	250,159	0.64	102,114	29,284	28.68
Niagara.....	28,824,926	144,591	0.50	110,253	43,506	39.45
North River.....	23,651,999	137,948	0.58	109,360	17,758	16.24
North Star.....	11,582,247	128,172	1.11	72,201	32,854	45.50
Northwestern Mutual.....	67,301,180	865,198	1.29	597,135	128,828	21.57
Northwestern National.....	25,923,577	238,399	0.92	145,452	38,809	26.68
Ohio Farmers.....	5,155,893	49,621	0.96	42,900	10,550	24.59
Pacific Fire.....	40,928,120	295,038	0.72	133,685	53,596	40.09
Paper Mill Mutual.....	3,507,758	21,389	0.61	5,733	2,909	50.74
Pennsylvania Lumbermens.....	6,888,138	85,202	1.24	64,958	17,056	26.26
Phenix of Paris.....	31,752,751	230,798	0.73	115,912	47,563	41.03
Philadelphia Fire and Marine.....	20,135,520	96,139	0.48	58,505	24,424	41.75
Philadelphia Manufacturers Mutual.....	8,785,897	56,700	0.65	14,127	4,396	31.12
Phenix of Hartford.....	84,512,157	521,189	0.62	231,767	75,763	32.69
Pilot Reinsurance.....	Nil	-	-	Nil	Nil	-
Protection Mutual.....	4,512,872	30,683	0.68	8,496	1,952	22.98
Providence of Paris.....	27,163,151	218,342	0.80	154,714	70,245	45.40
Providence Washington.....	23,046,414	145,875	0.63	89,814	31,173	34.71
Queen of America.....	113,848,798	836,333	0.73	427,250	157,654	36.90
Retail Lumbermens.....	3,760,212	31,413	0.84	28,517	7,809	27.38
Rhode Island.....	18,575,942	132,832	0.72	85,471	28,045	32.81
Rhode Island Mutual.....	17,755,312	103,247	0.58	18,519	10,713	57.85
Rossia.....	17,397,329	131,883	0.76	103,016	22,359	21.70
Rubber Manufacturers Mutual.....	6,660,005	43,239	0.65	9,513	4,601	48.37
St. Paul Fire.....	35,970,700	220,400	0.61	145,921	43,473	29.79
Security.....	21,684,490	118,437	0.55	72,220	21,748	30.11
Sentinel.....	13,574,724	86,555	0.64	6,664	2,810	42.17
Springfield.....	61,403,495	400,861	0.65	262,536	109,522	41.72
State Mutual.....	21,306,374	123,897	0.58	22,223	12,856	57.85
Sussex.....	10,796,818	104,183	0.96	87,992	31,264	35.56
Svea.....	8,233,547	50,593	0.61	27,838	3,251	11.68
Switzerland General.....	29,939,907	269,045	0.90	141,895	11,881	8.37
Tokio.....	9,283,813	43,123	0.47	33,198	12,988	39.12
Transcontinental.....	3,414,685	10,640	0.31	8,379	205	2.45
Travelers Fire.....	68,193,808	346,796	0.51	286,155	83,867	29.31
Underwriters Exchange.....	4,077,786	9,363	0.23	8,427	262	3.11
Union of Paris.....	37,249,097	296,533	0.80	245,824	99,661	40.54
United Firemen's.....	13,420,727	100,445	0.75	62,202	20,107	32.33
United Mutual.....	15,503,509	173,470	1.12	118,021	19,562	16.57
United States Fire.....	35,753,517	218,155	0.61	164,821	49,490	30.03
Urbaine.....	19,829,363	98,709	0.50	77,022	41,503	53.88
Warner Reciprocal.....	830,524	2,373	0.29	1,874	Nil	-
Westchester.....	27,742,689	159,864	0.58	94,945	33,623	35.41
What Cheer Mutual.....	7,951,987	49,681	0.62	11,055	4,701	42.52
Worcester Manufacturers Mutual.....	10,106,247	61,657	0.61	8,830	9,062	102.63
World Fire and Marine.....	9,611,668	73,669	0.77	61,206	12,581	20.56
Totals, Foreign.....	3,556,964,151	24,900,496	0.70	15,797,164	5,891,975	37.30
Grand Totals.....	9,642,269,141	66,831,026	0.69	40,218,255	14,742,126	36.66

3.—Assets of Canadian Companies Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Assets in Canada of Companies other than Canadian Transacting such Business in Canada, 1932-36.

Item.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$
Canadian Companies.					
Real estate.....	2,525,736	2,085,756	2,020,588	1,989,144	1,833,914
Loans on real estate.....	1,623,502	1,220,132	1,116,048	1,801,885	1,938,969
Stocks, bonds and debentures.....	44,960,198	44,080,324	45,611,133	50,515,906	56,674,057
Agents' balances and premiums outstanding.....	3,378,107	3,200,097	3,220,983	3,179,405	3,259,316
Cash on hand and in banks ¹	4,429,593	4,782,809	5,451,675	5,857,871	5,587,889
Interest and rents.....	537,858	511,366	504,444	530,024	524,483
Other assets.....	4,049,393	4,295,782	3,899,758	3,448,895	3,064,360
Totals, Assets.....	61,504,387	60,176,266	61,824,629	67,323,130	72,882,988
British Companies.					
Real estate.....	2,914,810	2,935,910	2,995,983	3,020,175	2,290,810
Loans on real estate.....	2,879,540	2,738,679	2,733,535	2,535,040	1,999,665
Stocks, bonds and debentures.....	46,647,883	46,925,785	50,857,791	50,353,298	49,196,988
Agents' balances and premiums outstanding.....	4,181,109	3,890,121	3,967,856	3,807,444	3,872,727
Cash on hand and in banks ¹	3,224,750	3,916,951	4,514,297	4,579,638	4,462,608
Interest and rents.....	330,703	293,393	292,177	284,484	266,540
Other assets in Canada.....	1,235,939	1,022,852	978,444	922,161	804,109
Totals, Assets in Canada.....	61,414,734	61,723,691	66,340,083	65,502,240	62,893,447
Foreign Companies.					
Real estate.....	—	—	—	—	—
Loans on real estate.....	13,000	13,000	13,000	13,000	13,000
Stocks, bonds and debentures.....	36,808,509	34,133,891	33,369,124	33,969,892	35,387,700
Agents' balances and premiums outstanding.....	3,000,938	2,695,116	2,788,018	2,682,621	2,892,533
Cash on hand and in banks ¹	6,342,273	5,409,339	6,111,374	7,137,333	6,740,761
Interest and rents.....	319,977	296,283	262,193	245,152	272,387
Other assets in Canada.....	256,425	199,810	150,196	170,809	95,450
Totals, Assets in Canada.....	46,741,122	42,747,439	42,693,905	44,218,807	45,401,831
All Companies.					
Real estate.....	5,440,546	5,021,666	5,016,572	5,009,319	4,124,724
Loans on real estate.....	4,516,042	3,971,811	3,862,583	4,349,925	3,951,634
Stocks, bonds and debentures.....	128,416,590	125,140,000	129,838,047	134,839,096	141,258,745
Agents' balances and premiums outstanding.....	10,560,154	9,785,334	9,976,857	9,669,470	10,024,576
Cash on hand and in banks ¹	13,996,616	14,109,099	16,077,346	17,574,842	16,791,258
Interest and rents.....	1,188,538	1,101,042	1,058,814	1,059,660	1,063,410
Other assets in Canada.....	5,541,757	5,518,444	5,028,398	4,541,865	3,963,919
Totals, Assets in Canada.....	169,660,243	164,647,396	170,858,617	177,044,177	181,178,266

¹ Or deposited with the Government.

4.—Liabilities of Canadian Companies Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Liabilities in Canada of Companies other than Canadian Transacting such Business in Canada, 1932-36.

Item.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$
Canadian Companies.					
Reserve for unsettled losses.....	5,135,795	4,871,034	4,976,772	4,970,058	4,644,185
Reserve of unearned premiums.....	13,747,055	12,765,072	12,598,953	12,589,143	13,033,448
Sundry items.....	7,590,953	7,197,726	6,540,093	6,640,900	8,055,097
Totals, Liabilities, Not Including Capital.....	26,473,803	24,833,832	24,115,818	24,200,101	25,732,730
Excess of assets over liabilities, excluding capital.....	35,030,584	35,342,433	37,708,811	43,123,029	47,150,259
Capital stock paid up.....	17,076,446	16,741,004	16,772,229	17,201,092	17,412,854

4.—Liabilities of Canadian Companies Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Liabilities in Canada of Companies other than Canadian Transacting such Business in Canada, 1932-36—concluded.

Item.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$
British Companies.					
Reserve for unsettled losses.....	4,639,231	4,225,657	3,400,961	3,190,800	3,188,672
Reserve of unearned premiums.....	18,058,163	16,774,248	16,225,608	15,828,479	15,568,239
Sundry items.....	3,009,101	1,959,979	1,888,313	1,996,588	1,751,518
Totals, Liabilities in Canada.....	25,706,495	22,959,884	21,514,882	21,015,867	20,508,429
Excess of assets over liabilities, excluding capital.....	35,708,239	38,763,807	44,825,202	44,486,373	42,385,018
Capital stock paid up.....	—	—	—	—	—
Foreign Companies.					
Reserve for unsettled losses.....	2,411,555	1,832,977	1,059,395	1,254,840	1,100,262
Reserve of unearned premiums.....	12,334,525	10,678,271	10,531,393	10,720,926	12,322,459
Sundry items.....	990,333	918,349	986,749	1,162,783	1,247,252
Totals, Liabilities in Canada.....	15,736,413	13,429,597	12,577,537	13,138,549	14,669,973
Excess of assets over liabilities, excluding capital.....	31,004,709	29,317,842	30,116,368	31,080,258	30,731,858
Capital stock paid up.....	—	—	—	—	—
All Companies.					
Reserve for unsettled losses.....	12,186,581	10,929,668	9,437,128	9,415,698	8,933,119
Reserve of unearned premiums.....	44,139,743	40,217,591	39,355,954	39,138,548	40,924,146
Sundry items.....	11,590,387	10,076,054	9,415,155	9,800,271	11,053,867
Totals, Liabilities in Canada, Not Including Capital.....	67,916,711	61,223,313	58,208,237	58,354,517	60,911,132
Excess of assets over liabilities, excluding capital.....	101,743,532	103,424,082	112,650,380	118,689,660	120,267,135
Capital stock paid up ¹	17,076,446	16,741,004	16,772,229	17,201,092	17,412,854

¹ Canadian companies only.

5.—Income and Expenditure of Canadian Companies Operating under Dominion Registration Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Income and Expenditure in Canada of Companies other than Canadian Transacting such Business in Canada, 1932-36.

Item	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$
INCOME.					
Canadian Companies.					
Net premiums written, fire and other insurance.....	24,197,136	22,304,621	23,121,983	22,082,758	22,911,717
Interest and dividends earned.....	2,429,914	2,243,109	2,261,329	2,369,553	2,500,051
Sundry items.....	1,011,964	1,667,657	3,205,661	4,071,625	4,770,420
Totals, Income.....	27,639,014	26,215,387	28,588,973	28,523,936	30,182,188

¹ Income and expenditure in Canada.

5.—Income and Expenditure of Canadian Companies Operating under Dominion Registration Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Income and Expenditure in Canada of Companies other than Canadian Transacting such Business in Canada, 1932-36—concluded.

Item.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$
INCOME—concluded.					
British Companies.¹					
Net cash for premiums.....	28,944,515	26,482,370	26,243,241	25,474,312	25,210,739
Interest and dividends on stocks, etc.....	1,660,570	1,418,894	1,523,618	1,108,045	907,527
Sundry items.....	6,697	7,644	11,696	1,878	84,338
Totals, Income¹	30,611,782	27,908,908	27,778,555	26,584,235	26,202,604
Foreign Companies.¹					
Net premiums written.....	21,013,821	17,020,224	17,611,181	18,605,796	19,260,146
Interest and dividends earned, etc.....	1,463,149	1,434,697	1,244,377	1,165,140	1,114,610
Sundry items.....	40,120	12,067	8,440	145	2,222
Totals, Income¹	22,517,090	18,466,988	18,863,998	19,771,081	20,376,978
EXPENDITURE.					
Canadian Companies.					
Incurred for losses (fire).....	7,334,323	5,535,097	5,023,355	4,271,020	4,179,480
General expenses (fire).....	6,863,370	7,022,317	7,113,962	6,969,212	6,837,687
On account of branches other than fire or life.....	12,207,206	11,535,019	12,176,171	11,629,827	11,207,478
Dividends or bonuses to shareholders....	1,474,712	958,223	1,049,407	1,257,937	2,044,148
Taxes.....	1,042,411	1,005,538	1,014,006	1,018,258	1,259,924
Totals, Expenditure	28,922,022	26,056,194	26,376,901	25,146,254	25,528,717
Excess of income over expenditure.....	-1,283,008	159,193	2,212,072	3,377,682	4,653,471
British Companies.¹					
Incurred for losses (fire).....	12,495,764	9,689,271	7,267,241	6,251,193	5,839,751
General expenses (fire).....	8,626,703	8,584,709	8,217,314	8,074,949	7,755,018
On account of branches other than fire or life.....	8,170,740	7,670,487	8,004,002	8,033,050	8,721,614
Taxes.....	1,233,827	1,129,150	1,196,576	1,297,532	1,267,445
Totals, Expenditure¹	30,527,034	27,073,617	24,685,133	23,656,724	23,583,828
Excess of income over expenditure.....	84,748	835,291	3,093,422	2,927,511	2,618,776
Foreign Companies.¹					
Incurred for losses (fire).....	12,969,086	8,272,440	6,492,204	5,942,698	5,629,986
General expenses (fire) ²	7,692,132	7,187,426	7,041,693	7,093,073	7,105,345
On account of branches other than fire or life.....	2,308,319	1,737,754	1,943,418	2,636,652	2,951,588
Taxes.....	1,030,117	919,544	851,998	1,003,448	1,107,679
Totals, Expenditure^{1, 2}	23,999,654	18,117,164	16,329,313	16,675,871	16,794,598
Excess of income over expenditure.....	-1,482,564	349,824	2,534,685	3,095,210	3,582,380

¹ Income and expenditure in Canada.² Including dividends returned to policyholders.

6.—Amounts of Net Premiums Written and Net Losses Incurred in Canada by Canadian Companies Operating under Dominion Registration, and by British and Foreign Companies Transacting Fire Insurance Business, by Provinces, 1935 and 1936.

(Registered reinsurance deducted.)

Province.	Canadian.		British.		Foreign.	
	Premiums.	Losses.	Premiums.	Losses.	Premiums.	Losses.
	\$	\$	\$	\$	\$	\$
1935.						
Prince Edward Island.....	35,947	17,493	152,846	60,624	67,272	22,495
Nova Scotia.....	327,808	154,062	823,120	303,455	736,977	324,461
New Brunswick.....	236,412	76,688	807,890	303,616	603,547	306,382
Quebec.....	1,499,814	713,167	4,301,770	1,919,835	4,667,439	2,164,403
Ontario.....	3,425,217	1,144,591	6,234,407	2,027,103	4,918,653	1,703,704
Manitoba.....	837,332	266,727	1,112,440	295,243	959,388	236,007
Saskatchewan.....	1,036,145	230,648	976,927	308,609	912,454	269,698
Alberta.....	895,014	218,222	1,195,436	397,358	1,136,939	348,505
British Columbia.....	633,919	188,261	1,822,983	634,275	1,517,917	566,068
Yukon.....	11,238	10,253	8,177	1,039	11,222	2,082
Totals¹.....	8,939,715	3,020,112	17,443,350	6,251,192	15,541,626	5,942,691
1936.						
Prince Edward Island.....	36,821	8,775	146,101	41,885	63,161	20,128
Nova Scotia.....	346,153	166,260	838,358	365,348	780,337	376,025
New Brunswick.....	293,044	65,535	871,145	226,101	610,934	259,389
Quebec.....	1,526,122	607,678	4,002,432	1,707,141	4,606,249	2,166,433
Ontario.....	3,390,627	1,154,493	5,788,478	2,232,229	5,116,258	1,700,928
Manitoba.....	865,355	298,535	1,013,484	223,865	935,549	206,061
Saskatchewan.....	1,065,382	270,576	879,557	252,956	925,634	203,993
Alberta.....	830,979	242,347	1,072,829	281,474	1,095,216	263,214
British Columbia.....	624,921	169,185	1,787,092	507,940	1,564,698	417,151
Yukon.....	3,456	13,296	23,498	637	16,672	2,297
Totals¹.....	8,988,537	2,984,084	16,495,563	5,839,749	15,744,170	5,626,186

¹ Totals include, in many cases, small items unapportioned by provinces.

Summary of Fire Insurance in Canada, 1936.—Of the total amount of fire insurance effected in Canada during each year, a part is sold by companies holding provincial licences and permits. Such companies generally confine their operations to the province of incorporation, but may be allowed to sell insurance in other provinces. The bulk of fire insurance business, however, is transacted by companies registered by the Dominion. Operations in 1936 are summarized in Table 7.

7.—Dominion and Provincial Fire Insurance in Canada, 1936.

Item.	Gross Insurance Written.	Net in Force at End of Year.	Net Premiums Received.	Net Losses Paid.
	\$	\$	\$	\$
Dominion Licensees.....	9,642,269,141	9,248,273,260	40,218,296	14,072,237
Provincial Licensees—				
(a) Provincial companies within provinces by which they are incorporated.....	636,794,823	1,092,185,530	4,510,467	1,979,716
(b) Provincial companies within provinces other than those by which they are incorporated.....	94,164,836	92,666,516	492,136	210,908
Totals, Provincial Licensees.....	730,959,659	1,184,852,046	5,002,603	2,190,624
Grand Totals, 1936.....	10,373,228,800	10,433,125,306	45,220,899	16,262,861
Grand Totals, 1935.....	10,566,640,152	10,426,722,052	46,134,914	17,234,463

Section 2.—Life Insurance.

An article descriptive of the growth and development of life insurance in Canada, more particularly with reference to insurance legislation, contributed by A. D. Watson, of the Department of Insurance, Ottawa, appeared on pp. 937-944 of the Canada Year Book, 1933.

Life Insurance Statistics.—Life insurance business was transacted in Canada in 1936 by 42 companies registered by the Dominion, including 28 Canadian, 6 British, and 8 foreign companies. There were also 6 British and 7 foreign companies registered to write insurance which had practically ceased to write new insurance, while 2 other British and 3 other foreign companies were authorized under the Act to transact business in connection only with policies written prior to Mar. 31, 1878. One foreign company was licensed to transact business in 1931, but has not yet written any life insurance business in Canada, except by way of reinsurance.

As shown by the chronological statistics of Table 8, life insurance business in Canada has expanded from very small beginnings, the total net life insurance in force in all companies licensed by the Dominion in 1869 being only \$35,680,082, while in 1936 it was \$6,403,037,477,* the amount per head of the estimated population of Canada having more than doubled since 1919—an evidence of the general recognition of the value of life insurance for the adequate protection of dependants against misfortune. Notable also from these statistics is the fact that in this field British companies, the leaders in 1869, have fallen far behind the Canadian and the foreign companies. The total net amount of new insurance effected during the year 1936 was \$618,264,819,† as compared with \$588,353,277 in 1935, \$595,194,820 in 1934, \$578,585,659 in 1933, \$653,249,366 in 1932, \$782,716,064 in 1931, \$884,749,748 in 1930, and \$978,141,485 in 1929, while the premiums paid were \$200,541,265, as compared with \$200,157,567 in 1935, \$202,583,536 in 1934, \$206,954,224 in 1933, \$216,132,957 in 1932, \$225,100,571 in 1931, \$220,523,727 in 1930, and \$210,728,479 in 1929.

In Table 9 detailed statistics are given of the business of Canadian, British, and foreign companies, respectively, by companies, in 1936, while Table 10 is a summary showing the business of Canadian, British, and foreign companies for the past 5 years. Table 11 shows the ordinary and industrial policies in force and effected during the year ended Dec. 31, 1936. Table 12 gives the insurance death rates by classes of companies, and Tables 13, 14 and 15 show, respectively, the assets, liabilities, cash income, and expenditure of Canadian and other life insurance companies for the years 1932-36. Statistics of Dominion fraternal insurance are given in Table 16 and of Dominion and provincial insurance combined in Table 17, which shows that on Dec. 31, 1936, the total life insurance in force in Canada was \$6,701,667,839.

* This total does not include \$168,586,134 of fraternal insurance. Preliminary figures for 1937 indicate \$6,542,786,202 of life insurance in force in Dominion companies not including \$174,384,095 of fraternal insurance.

† The net amount of new insurance effected in 1937 was \$672,794,298 according to preliminary figures.

8.—Life Insurance in Force and Effectuated in Canada by Companies Operating under Dominion Registration, calendar years 1869-1937.¹

Year.	Net Amounts in Force.				Insurance in Force per Head of Estimated Population. ²	Net Amount of New Insurance Effectuated during Year.
	Canadian Companies.	British Companies.	Foreign Companies.	Total.		
	\$	\$	\$	\$	\$	\$
1869.....	5,476,358	16,318,475	13,885,249	35,680,082	10-01	12,854,132
1870.....	6,404,437	17,391,922	18,898,353	42,694,712	11-78	12,194,696
1871.....	8,711,111	18,405,325	18,709,499	45,825,935	12-42	13,332,626
1872.....	13,070,811	19,258,166	34,905,707	67,234,684	17-91	21,070,101
1873.....	15,777,197	18,862,191	42,861,508	77,500,896	20-26	21,053,618
1874.....	19,634,319	19,863,867	46,218,139	85,716,325	22-01	19,108,221
1875.....	21,957,296	19,455,607	43,596,361	85,009,264	21-50	15,074,258
1876.....	24,649,284	18,873,173	40,728,461	84,250,918	21-02	13,290,127
1877.....	26,870,224	19,349,204	39,468,475	85,687,903	21-08	13,534,667
1878.....	28,656,556	20,078,533	36,016,848	84,751,937	20-67	12,169,755
1879.....	33,246,543	19,410,829	33,616,330	86,273,702	20-62	11,354,224
1880.....	37,838,518	19,789,863	33,643,745	91,272,126	21-45	13,906,887
1881.....	46,041,591	20,983,092	36,266,249	103,290,932	23-88	17,618,011
1882.....	53,855,051	22,329,368	38,857,629	115,042,048	26-30	20,112,755
1883.....	59,213,609	23,511,712	41,471,554	124,196,875	28-04	21,572,960
1884.....	66,519,958	24,317,172	44,616,596	135,453,726	30-19	23,303,412
1885.....	74,591,139	25,930,272	49,440,735	149,962,146	33-05	26,767,488
1886.....	88,181,859	27,225,607	55,908,230	171,315,696	37-41	34,800,598
1887.....	101,796,754	28,163,329	61,734,187	191,694,270	41-44	37,381,810
1888.....	114,034,279	30,003,210	67,724,094	211,761,583	45-27	40,923,529
1889.....	125,125,692	30,488,618	76,349,392	231,963,702	49-05	43,912,187
1890.....	135,218,990	31,613,730	81,591,847	248,424,567	51-98	39,802,956
1891.....	143,368,817	32,407,937	85,698,475	261,475,229	54-16	37,609,287
1892.....	154,709,077	33,692,706	90,708,482	279,110,265	57-16	44,062,440
1893.....	167,475,872	33,543,884	94,602,966	295,622,722	59-95	44,802,847
1894.....	177,511,846	33,911,885	96,737,705	308,161,436	61-89	49,111,010
1895.....	188,326,057	34,341,172	96,590,352	319,257,581	63-52	44,101,898
1896.....	195,303,042	34,837,448	97,660,009	327,800,499	64-60	42,293,322
1897.....	208,655,459	35,293,134	100,063,684	344,012,277	67-16	47,710,165
1898.....	226,209,636	36,606,195	105,708,154	368,523,985	71-21	54,387,303
1899.....	252,201,516	38,025,948	113,943,209	404,170,673	77-21	66,184,063
1900.....	267,151,086	39,485,344	124,433,416	431,069,846	81-32	67,729,115
1901.....	284,684,621	40,216,186	138,868,227	463,769,034	86-35	72,854,859
1902.....	308,022,596	41,556,245	159,053,464	508,812,305	92-61	79,638,914
1903.....	335,638,940	42,127,260	170,676,800	548,443,000	97-05	90,732,415
1904.....	364,040,166	42,608,738	180,631,886	587,880,790	100-89	97,617,402
1905.....	397,946,902	43,809,211	188,578,127	630,334,240	105-02	104,719,585
1906.....	420,864,847	45,655,951	189,740,102	656,260,900	106-46	93,722,510
1907.....	450,573,724	46,462,314	188,487,447	685,523,485	106-93	88,784,250
1908.....	480,266,931	46,161,957	193,087,126	719,516,014	108-61	98,644,410
1909.....	515,415,437	46,985,192	217,956,351	780,356,980	114-76	130,122,008
1910.....	565,667,110	47,816,775	242,629,174	856,113,059	122-51	150,785,305
1911.....	626,770,154	50,919,675	272,530,942	950,220,771	131-85	173,341,738
1912.....	706,656,117	54,537,725	309,114,827	1,070,308,669	144-85	212,772,151
1913.....	750,637,902	58,176,795	359,775,330	1,168,590,027	153-12	225,606,787
1914.....	794,520,423	60,770,658	386,869,397	1,242,160,478	157-65	212,977,464
1915.....	829,972,809	58,087,018	423,556,850	1,311,616,677	164-34	218,205,427
1916.....	895,528,435	59,151,931	467,499,266	1,422,179,632	177-75	227,210,162
1917.....	996,699,282	58,617,506	529,725,775	1,585,042,563	196-66	277,532,095
1918.....	1,105,503,447	60,296,113	619,261,713	1,785,061,273	219-08	307,279,759
1919.....	1,362,631,562	66,908,064	758,297,691	2,187,837,317	263-25	517,863,639
1920.....	1,664,348,605	76,883,090	915,793,798	2,657,025,493	310-55	630,110,900
1921.....	1,860,026,952	84,940,938	989,875,958	2,934,843,848	333-96	514,654,111
1922.....	2,013,722,848	93,791,180	1,063,874,968	3,171,388,996	355-58	502,279,333
1923.....	2,187,434,147	98,023,020	1,148,051,506	3,433,586,673	381-03	548,640,800
1924.....	2,413,853,480	103,519,236	1,246,623,756	3,763,996,472	411-64	515,372,723
1925.....	2,672,989,676	108,565,248	1,377,464,924	4,159,019,848	447-44	712,091,889
1926.....	2,979,946,768	111,375,336	1,518,874,230	4,610,196,334	487-65	797,940,009
1927.....	3,277,050,348	113,883,716	1,653,474,770	5,044,408,834	523-44	838,475,057
1928.....	3,671,325,188	115,340,577	1,820,979,858	5,607,645,623	570-16	918,742,064
1929.....	4,051,612,499	116,545,637	1,989,104,071	6,157,262,207	613-94	978,141,435
1930.....	4,319,370,209	117,410,860	2,055,502,125	6,492,283,194	636-00	884,749,748
1931.....	4,409,707,938	119,262,511	2,093,297,344	6,622,267,793	638-17	782,716,064
1932.....	4,311,747,692	115,831,319	2,044,029,535	6,471,608,546	615-99	653,249,366
1933.....	4,160,351,570	113,807,916	1,973,466,488	6,247,625,974	584-93	578,585,659
1934.....	4,139,796,088	116,745,642	1,964,184,199	6,220,725,929	574-13	595,194,820
1935.....	4,164,893,298	123,148,555	1,971,116,251	6,259,158,404	571-66	588,353,277
1936.....	4,256,850,150	129,940,311	2,016,247,016	6,403,037,477	580-62	618,264,819
1937 ³	4,305,806,010	137,849,456	2,099,130,736	6,542,786,202	588-38	672,794,298

¹ Figures do not include insurance in force and effectuated by fraternal societies operating under Dominion charters. The amount of insurance in force in such societies amounted to \$174,334,035 in 1937, according to preliminary figures. Corresponding figures for the years 1932-36 are given in Table 16, pp. 965-966.

² For estimates of populations upon which these figures are based, see p. 155.

³ Subject to revision.

9.—Life Insurance in Force and Effected in Canada by Companies Operating under Dominion Registration, 1936.

NOTE.—The statistics of this table do not include the business of Canadian companies outside of Canada.

Company.	Policies Effected.		Policies in Force.		Net Premium Income.	Net Amount of Policies Become Claims. ¹
	No.	Net Amount.	No.	Net Amount.		
Canadian Companies—		\$		\$	\$	\$
Ancient Foresters.....	5,663	1,937,875	14,612	6,293,464	189,110	57,611
Canada.....	7,407	21,352,653	119,077	378,540,411	10,605,893	4,601,963
Commercial.....	1,234	1,242,569	5,672	10,002,843	309,055	106,985
Confederation.....	9,123	21,435,264	107,026	235,222,965	8,032,436	2,199,676
Continental of Canada.....	3,013	4,986,072	22,259	36,357,192	1,115,220	299,696
Crown.....	6,068	14,712,668	51,893	111,325,712	3,247,824	923,797
Dominion.....	4,343	16,136,193	55,318	140,998,267	4,487,065	1,336,447
Dominion of Canada.....	771	1,166,554	5,185	8,264,382	235,394	30,233
T. Eaton.....	1,155	2,500,752	12,999	25,799,095	935,116	165,278
Equitable of Canada.....	770	2,311,377	16,338	35,664,453	1,004,268	311,941
Excelsior.....	6,292	14,478,859	45,254	91,143,602	2,750,068	815,039
Great-West.....	10,940	27,988,605	200,322	453,726,677	13,619,632	3,781,290
Imperial.....	5,332	13,308,793	83,505	206,977,566	6,917,696	1,996,324
London.....	125,145	84,312,396	613,198	541,365,397	15,895,872	2,922,048
Manufacturers.....	8,193	16,939,673	121,437	257,775,836	7,690,100	2,081,603
Maritime.....	705	1,520,680	4,083	8,446,702	227,402	42,619
Monarch.....	4,234	6,971,963	30,933	53,992,136	1,589,960	388,091
Montreal.....	2,159	4,784,065	15,708	32,204,686	1,047,302	379,703
Mutual of Canada.....	17,122	39,008,203	207,655	497,204,890	16,087,559	5,213,062
National.....	2,767	6,693,309	24,582	51,239,298	1,634,840	478,100
North American.....	7,858	18,559,756	79,356	171,171,647	5,860,490	1,772,626
Northern.....	2,163	4,970,605	25,163	41,721,431	1,232,061	352,158
Royal Guardians.....	1,368	697,528	6,554	3,434,014	125,472	69,385
Saskatchewan.....	1,357	1,758,195	6,294	8,537,354	222,968	34,756
Sauvegarde.....	7,419	9,304,580	24,578	31,970,548	875,371	209,655
Sovereign.....	2,777	5,212,451	14,139	27,785,579	901,485	177,499
Sun.....	15,426	44,008,920	239,980	784,102,275	22,382,986	6,624,390
Western.....	1,396	1,608,827	3,573	5,581,728	135,614	15,225
Totals.....	262,200	389,909,385	2,156,693	4,256,850,150	129,258,259	37,337,200
British Companies —						
Commercial Union.....	2	—	66	285,247	4,000	73
Gresham.....	2	—	674	1,406,997	35,977	83,722
Life Association of Scot- land.....	2	—	1	1,547	Nil	4,966
Liverpool and London and Globe.....	2	—	2	8,924	22	Nil
London and Scottish.....	1,091	2,585,328	6,989	16,736,618	544,405	349,117
Mutual and Citizens (Aus- tralia).....	17,882	5,235,714	115,398	30,724,183	1,087,704	393,242
North British and Mer- cantile.....	2	—	165	714,469	20,929	39,030
Norwich Union.....	2	—	1	2,208	421	—
Phoenix of London.....	30	63,000	1,260	4,552,613	124,277	199,019
Prudential of London.....	1,922	4,564,265	7,054	18,143,467	559,281	30,160
Royal.....	776	2,586,877	6,235	24,868,239	682,108	340,512
Scottish Amicable.....	2	—	2	6,552	106	556
Standard.....	1,349	3,588,557	10,743	32,448,599	915,619	451,532
Star.....	2	—	22	40,648	518	2,422
Totals.....	23,050	18,623,741	148,612	129,940,311	3,975,367	1,894,351
Foreign Companies—						
Ætna.....	765	3,096,973	12,084	101,734,552	1,656,773	1,030,651
Connecticut Mutual.....	2	—	1	2,000	43	Nil
Continental of Illinois.....	3	—	—	—	—	—
Equitable of U.S.....	2	—	5,662	15,592,552	422,510	428,399
Guardian.....	1	5,000	34	140,044	4,493	59
Loyal.....	11	11,000	11	11,000	535	Nil
Metropolitan.....	309,752	123,711,042	2,606,930	1,064,883,175	36,510,084	9,334,200
Mutual of New York.....	2	—	19,719	52,133,868	1,764,770	974,400
New York.....	2,446	4,557,700	65,055	145,717,425	4,695,441	1,911,400
Northwestern Mutual.....	2	—	6	7,149	31	1,029
Occidental.....	463	2,583,791	3,024	8,679,259	216,298	88,800
Pan-American.....	2	—	12	64,343	1,318	Nil
Phoenix Mutual.....	2	—	6	2,978	43	55
Provident Savings.....	2	—	144	192,544	4,445	8,000
Prudential of America.....	198,717	70,330,421	1,369,094	506,036,347	18,770,869	3,613,821
State.....	1	2,500	106	859,349	16,570	10,000
Travelers.....	1,501	5,377,266	23,710	114,794,059	3,107,694	1,362,010

¹ Including matured endowments.
tered but not yet active.

² Ceased transacting new business in Canada.

³ Regis-

9.—Life Insurance in Force and Effected in Canada by Companies Operating under Dominion Registration, 1936—concluded.

Company.	Policies Effected.		Policies in Force.		Net Premium Income.	Net Amount of Policies Become Claims. ¹
	No.	Net Amount.	No.	Net Amount.		
Foreign Companies—concl.		\$		\$	\$	\$
Union Labor.....	2	—	40	76,500	2,736	Nil
Union Mutual.....	39	56,000	2,108	4,999,316	122,760	64,053
United States.....	2	—	142	320,556	10,226	28,206
Totals.....	513,696	209,731,693	4,107,888	2,016,247,016	67,307,639	18,855,083
SUMMARY.						
Canadian companies.....	262,200	389,909,385	2,156,693	4,256,850,150	129,258,259	37,337,200
British companies.....	23,050	18,623,741	148,612	129,940,311	3,975,367	1,894,351
Foreign companies.....	513,696	209,731,693	4,107,888	2,016,247,016	67,307,639	18,855,083
Grand Totals.....	798,946	618,264,819	6,413,193	6,403,037,477	200,541,265	58,086,634

¹ Including matured endowments.² Ceased transacting new business in Canada.

10.—Progress of Life Insurance Effected under Dominion Registration, calendar years 1932-36.

Item.	1932.	1933.	1934.	1935.	1936.
Canadian Companies—¹					
Policies effected.....	No. 247,256	237,655	256,294	241,514	262,200
Policies in force at end of each year..	" 2,131,824	2,059,069	2,077,236	2,100,310	2,156,693
Policies become claims.....	" 23,267	21,851	20,471	20,284	20,818
Net amounts of policies effected....	\$ 399,498,023	353,725,137	366,634,749	365,542,246	389,909,385
Net amounts of policies in force....	\$ 4,311,747,692	4,160,351,570	4,139,796,088	4,164,893,298	4,256,850,150
Net amounts of policies become claims.....	\$ 37,800,409	36,776,004	35,102,636	34,395,990	37,337,200
Amounts of premiums.....	\$ 138,805,014	133,693,742	131,407,513	128,714,106	129,258,259
Claims paid ²	\$ 39,148,951	38,514,102	36,246,115	36,114,865	38,207,604
Unsettled Claims—					
Not resisted.....	\$ 4,051,937	4,082,544	4,537,956	4,780,181	5,437,204
Resisted.....	\$ 142,650	126,977	150,785	104,192	132,159
British Companies—					
Policies effected.....	No. 15,690	23,457	31,437	25,690	23,050
Policies in force at end of each year..	" 132,835	135,484	143,132	145,111	148,612
Policies become claims.....	" 1,561	1,814	1,972	1,954	2,244
Net amounts of policies effected....	\$ 13,054,139	13,930,045	17,131,400	17,961,436	18,623,741
Net amounts of policies in force....	\$ 115,831,319	113,807,916	116,745,642	123,148,855	129,940,311
Net amounts of policies become claims.....	\$ 2,134,503	1,931,290	2,158,900	1,560,289	1,894,351
Amounts of premiums.....	\$ 3,821,016	3,671,235	3,682,687	4,733,100	3,975,367
Claims paid ²	\$ 2,041,201	1,989,965	1,860,638	1,432,254	1,910,261
Unsettled Claims—					
Not resisted.....	\$ 342,714	257,546	445,952	466,822	453,075
Resisted.....	\$ —	—	—	—	—
Foreign Companies—					
Policies effected.....	No. 546,053	497,794	518,617	510,090	513,696
Policies in force at end of each year..	" 4,322,793	4,156,354	4,120,156	4,106,278	4,107,888
Policies become claims.....	" 40,650	39,292	39,464	47,394	49,772
Net amounts of policies effected....	\$ 240,697,204	210,930,477	211,428,671	204,849,595	209,731,693
Net amounts of policies in force....	\$ 2,044,029,535	1,973,466,488	1,964,184,199	1,971,116,251	2,016,247,016
Net amounts of policies become claims.....	\$ 17,817,735	16,769,945	16,621,059	17,842,159	18,855,083
Amounts of premiums.....	\$ 73,506,927	69,589,247	67,493,336	66,710,361	67,307,639
Claims paid ²	\$ 18,903,444	18,250,412	17,956,517	19,281,966	20,315,814
Unsettled Claims—					
Not resisted.....	\$ 1,173,282	1,167,959	1,325,690	1,443,126	1,633,570
Resisted.....	\$ 136,706	195,266	103,098	80,333	67,148

¹ Figures of Canadian business only.² Death claims, matured endowments, and disability claims.

10.—Progress of Life Insurance Effected under Dominion Registration, calendar years 1932-36—concluded.

Item.	1932.	1933.	1934.	1935.	1936.
All Companies—					
Policies effected.....No.	808,999	758,906	806,348	777,294	798,946
Policies in force at end of each year. “	6,587,452	6,350,907	6,340,524	6,351,699	6,413,193
Policies become claims.....“	65,478	62,957	61,907	69,632	72,834
Net amounts of policies effected... \$	653,249,366	578,585,659	595,194,820	588,353,277	618,264,819
Net amounts of policies in force.... \$	6,471,608,546	6,247,625,974	6,220,725,929	6,259,158,404	6,403,037,477
Net amounts of policies become claims..... \$	57,752,647	55,477,239	53,882,595	53,798,438	58,086,634
Amounts of premiums..... \$	216,132,957	206,954,224	202,583,536	200,157,567	200,541,265
Claims paid ¹ \$	60,093,596	58,754,479	56,063,270	56,829,085	60,433,679
Unsettled Claims—					
Not resisted..... \$	5,567,933	5,508,049	6,309,598	6,690,129	7,523,849
Resisted..... \$	279,356	322,243	253,883	184,525	199,307

¹ Death claims, matured endowments, and disability claims.

11.—Ordinary and Industrial Life Insurance Policies in Force and Issued in Canada by Companies Operating under Dominion Registration, 1936.

Type of Policy and Nationality of Company.	Newly Issued.			In Force.		
	Number.	Total Amount.	Average Amount of a Policy.	Number.	Total Amount.	Average Amount of a Policy.
		\$	\$		\$	\$
Ordinary Policies—						
Canadian companies.....	158,380	359,841,397	2,272	1,662,271	3,841,729,412	2,311
British companies.....	7,218	16,148,653	2,237	43,237	115,985,940	2,683
Foreign companies.....	71,216	113,561,015	1,595	727,606	1,186,580,340	1,631
Totals, All Companies	236,814	489,551,065	2,067	2,433,114	5,144,295,692	2,114
Industrial Policies—						
Canadian companies.....	113,980	47,110,107	413	492,442	184,813,379	375
British companies.....	16,285	3,529,308	217	105,370	16,971,207	161
Foreign companies.....	451,122	105,798,697	235	3,379,913	652,745,203	193
Totals, All Companies	581,387	156,438,112	269	3,977,725	854,529,789	215

12.—Insurance Death Rates in Canada, 1933-36.

Type of Insurer.	Number of Policies Exposed to Risk.	Number of Policies Terminated by Death.	Death Rate per 1,000.	Number of Policies Exposed to Risk.	Number of Policies Terminated by Death.	Death Rate per 1,000.
	1933.			1934.		
All companies, ordinary.....	2,462,673	14,301	5.8	2,417,547	14,040	5.8
All companies, industrial.....	4,024,931	26,855	6.7	3,946,182	26,333	6.7
Fraternal benefit societies....	207,843	3,068	14.8	204,678	3,062	15.0
Totals.....	6,695,447	44,224	6.6	6,568,407	43,435	6.6
	1935.			1936.		
All companies, ordinary.....	2,408,858	14,473	6.0	2,433,360	15,106	6.2
All companies, industrial.....	3,961,037	26,701	6.7	3,976,250	27,103	6.8
Fraternal benefit societies....	195,827	3,218	16.4	202,181	3,284	16.2
Totals.....	6,565,722	44,392	6.8	6,611,791	45,493	6.9

13.—Assets of Canadian Life Companies with Dominion Registration, and Assets in Canada of Life Companies other than Canadian Companies, 1932-36.

NOTE.—Certain British companies transacting fire insurance in Canada transact also life insurance in Canada, and inasmuch as a separation of assets has not been made between these two classes, their assets in Canada are not included here, but are included in the assets of British companies shown in Table 3 on p. 953.

Item.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$
Canadian Companies—¹					
Real estate.....	58,337,559	63,073,581	69,379,472	75,503,841	80,495,129
Real estate held under agreements of sale.....	13,037,053	13,932,171	14,538,336	15,134,489	17,658,063
Loans on real estate.....	335,551,887	323,148,767	310,791,592	300,707,103	297,992,429
Loans on collaterals.....	133,165	138,574	126,010	809,128	222,113
Policy loans.....	295,133,868	294,299,076	284,466,595	272,158,603	261,172,955
Stocks, bonds and debentures.....	853,612,304	885,174,606	993,039,478	1,100,025,515	1,250,954,257
Interest and rent due and accrued.....	31,683,251	31,780,768	31,591,496	31,115,498	29,413,033
Cash on hand and in banks.....	17,139,284	31,424,004	32,249,720	40,240,011	31,289,540
Outstanding and deferred premiums.....	47,408,318	44,595,013	42,499,654	41,464,884	40,878,240
Other assets.....	3,067,348	3,475,114	2,625,116	3,585,954	3,127,374
Totals, Assets²	1,655,104,037	1,691,041,674	1,781,307,469	1,880,745,026	2,013,204,133
British Companies—					
Real estate.....	766,288	765,390	892,058	933,158	1,049,529
Real estate held under agreements of sale.....	68,268	72,328	37,813	31,364	24,610
Loans on real estate.....	12,120,340	11,699,041	11,325,817	10,867,000	10,151,601
Loans on collaterals.....	10,773	13,850	13,610	38,510	13,510
Policy loans.....	4,846,743	4,661,193	4,568,307	4,307,469	4,041,957
Stocks, bonds and debentures.....	40,807,801	42,767,734	52,949,697	51,161,817	53,896,211
Interest and rent due and accrued.....	607,922	620,861	638,897	594,190	575,502
Cash on hand and in banks.....	812,017	845,193	1,175,226	987,736	832,282
Outstanding and deferred premiums.....	540,977	505,370	480,525	451,784	476,225
Other assets.....	14,468	20,673	18,482	26,264	17,215
Totals, Assets in Canada.....	60,595,597	61,971,633	72,100,432	69,399,292	71,078,642
Foreign Companies—					
Real estate.....	2,562,060	2,581,001	2,588,944	5,269,627	5,696,573
Real estate held under agreements of sale.....	3	3	3	3	3
Loans on real estate.....	30,339,447	29,550,019	28,007,828	26,619,081	24,981,149
Loans on collaterals.....	3	3	3	3	3
Policy loans.....	57,986,328	60,478,765	61,198,865	60,695,186	60,296,544
Stocks, bonds and debentures.....	340,762,120	340,788,017	372,056,124	376,622,542	391,066,447
Interest and rent due and accrued.....	6,000,489	6,224,729	6,292,263	6,196,987	6,203,412
Cash on hand and in banks.....	6,018,138	6,641,751	8,114,505	8,396,188	9,918,566
Outstanding and deferred premiums.....	8,812,455	8,538,695	8,676,335	8,510,123	8,320,073
Other assets.....	7,200	6,527	8,747	10,119	11,549
Totals, Assets in Canada.....	452,488,237	454,809,504	486,943,611	492,319,853	506,494,313

¹ A detailed classification of assets showing investments of Canadian companies and giving the percentage of the total in each group and sub-group for 1935 and 1936 will be found at p. lii of the report of the Superintendent of Insurance, Vol. II, for the year ended Dec. 31, 1936. ² The figures in the table give the book values. The market (or authorized) values of these assets were: \$1,632,528,293 in 1932, \$1,673,787,245 in 1933, \$1,769,443,643 in 1934, \$1,868,987,065 in 1935, and \$2,012,215,355 in 1936. ³ None reported.

14.—Liabilities of Canadian Life Companies with Dominion Registration, and Liabilities in Canada of Life Companies other than Canadian Companies, 1932-36.

Item.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$
Canadian Companies—					
Unsettled claims.....	11,364,699	12,100,194	11,871,872	13,050,445	14,181,886
Net reinsurance reserve.....	1,382,510,308	1,425,125,109	1,505,819,533	1,588,098,044	1,687,181,483
Sundry liabilities.....	195,435,568	193,018,372	206,856,357	219,453,533	246,686,777
Totals, Liabilities, not including Capital.....	1,589,310,575	1,630,243,675	1,724,547,762	1,820,602,022	1,948,050,146
Surplus of assets, excluding capital.....	43,217,718	43,543,570	44,895,881	48,385,043	64,165,209
Capital stock paid up.....	10,917,714	10,849,899	10,851,079	10,714,596	11,091,148

14.—Liabilities of Canadian Life Companies with Dominion Registration, and Liabilities in Canada of Life Companies other than Canadian Companies, 1932-36—concluded.

Item.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$
British Companies—¹					
Unsettled claims.....	342,715	257,546	445,952	466,822	453,075
Net reinsurance reserve.....	33,477,760	33,164,530	32,732,196	34,195,194	35,044,871
Sundry liabilities.....	1,086,249	572,033	496,863	553,201	715,504
Totals, Liabilities, not including Capital¹.....	34,906,724	33,949,109	33,675,011	35,215,217	36,213,450
Surplus of assets in Canada.....	25,695,188	28,028,839	38,431,736	34,190,390	34,872,208
Foreign Companies—¹					
Unsettled claims.....	1,309,988	1,363,223	1,428,789	1,523,458	1,700,718
Net reinsurance reserve.....	363,342,761	368,556,297	379,364,705	391,152,923	404,775,317
Sundry liabilities.....	19,748,735	19,330,173	19,250,375	19,161,479	21,518,345
Totals, Liabilities, not including Capital¹.....	384,401,484	389,249,693	400,043,869	411,837,860	427,994,380
Surplus of assets in Canada.....	68,086,753	65,559,811	86,899,742	80,481,993	78,499,933

¹ Liabilities in Canada.
15.—Totals of Cash Income and Expenditure of Canadian Life Companies with Dominion Registration, and Cash Income and Expenditure in Canada of British and Foreign Life Companies, by Principal Items, 1932-36.

Item.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$
INCOME.					
Canadian Companies—¹					
Net premium income (including sinking funds).....	268,073,016	248,054,820	247,688,370	242,592,120	241,855,580
Consideration for annuities.....	18,818,166	27,895,586	38,411,121	24,682,052	25,508,449
Interest, dividends and rents.....	73,702,893	72,963,331	76,754,763	79,205,749	84,402,395
Sundry items.....	31,273,618	30,546,735	30,242,669	37,823,442	53,954,295
Totals, Cash Income¹.....	391,867,693	379,460,472	393,096,923	384,303,363	405,720,719
British Companies—²					
Net premium income (including sinking funds).....	3,823,905	3,674,124	3,685,576	4,735,989	3,978,180
Consideration for annuities.....	31,891	130,674	150,100	236,353	416,589
Interest, dividends and rents.....	2,488,544	2,378,363	2,577,378	2,627,766	2,461,065
Sundry items.....	125,961	142,711	123,065	93,109	200,745
Totals, Cash Income².....	6,470,301	6,325,932	6,536,119	7,693,217	7,056,579
Foreign Companies—²					
Net premium income.....	73,506,927	69,589,247	67,493,336	66,710,361	67,307,639
Consideration for annuities.....	739,367	969,074	1,197,298	1,272,025	1,609,131
Interest, dividends and rents.....	25,043,772	25,074,984	25,190,898	24,569,493	21,456,301
Sundry items.....	2,075,486	2,404,369	3,191,575	2,706,000	3,238,487
Totals, Cash Income².....	101,365,552	98,037,674	97,073,107	95,257,879	93,611,558
EXPENDITURE.					
Canadian Companies—¹					
Payments to policyholders.....	240,290,876	232,651,353	210,376,762	194,269,254	190,307,438
General expenses.....	62,764,123	55,818,105	54,521,948	54,788,898	56,678,411
Dividends to stockholders.....	1,284,255	978,401	1,032,675	1,042,022	1,123,781
Other disbursements.....	27,673,482	22,083,535	19,315,106	21,170,341	23,463,163
Totals, Expenditure¹.....	332,012,736	311,531,394	285,246,491	271,270,515	271,572,793
Excess of income over expenditure.....	59,854,957	67,929,078	107,850,432	113,032,848	134,147,926

¹ Includes income on business outside of Canada.² Income in Canada.

15.—Totals of Cash Income and Expenditure of Canadian Life Companies with Dominion Registration, and Cash Income and Expenditure in Canada of British and Foreign Life Companies, by Principal Items, 1932-36—concluded.

Item.	1932.	1933.	1934.	1935.	1936.
	\$	\$	\$	\$	\$
EXPENDITURE—concluded.					
British Companies—¹					
Payments to policyholders.....	3,982,297	4,115,646	3,348,684	3,791,435	3,373,878
General expenses.....	1,076,476	1,057,672	1,113,153	1,149,283	1,267,760
Other disbursements.....	79,529	178,513	102,629	122,985	86,687
Totals, Expenditure¹.....	5,138,302	5,351,831	4,564,466	5,063,703	4,728,325
Excess of income over expenditure.....	1,331,999	974,101	1,971,653	2,629,514	2,328,254
Foreign Companies—²					
Payments to policyholders.....	58,311,755	60,260,889	55,176,652	53,897,929	53,586,710
General expenses.....	14,310,784	13,511,680	13,342,697	13,617,539	13,494,715
Other disbursements.....	1,995,514	2,018,185	1,898,402	1,790,883	1,914,591
Totals, Expenditure².....	74,618,053	75,790,754	70,407,751	69,306,351	68,996,016
Excess of income over expenditure.....	26,747,499	22,246,920	26,665,356	25,951,528	24,615,542

¹ Includes income on business outside of Canada.

² Expenditure in Canada.

Life Insurance Effected through Fraternal Benefit Societies.—In addition to life insurance, some fraternal benefit societies grant other insurance benefits to members, notably sickness benefits, but these are relatively unimportant. Table 16 gives statistics of life insurance effected with fraternal benefit societies by Canadian members, together with statistics of assets, liabilities, income and expenditure relating to the whole business of Canadian societies and to the business in Canada of foreign societies. The rates charged by these societies are computed to be sufficient to provide the benefits granted, having regard for actuarial principles. Each benefit fund of every society must be valued annually by a qualified actuary (Fellow, by examination, of the Institute of Actuaries, London; of the Faculty of Actuaries in Scotland; of the Actuarial Society of America; or of the American Institute of Actuaries); and unless the actuary certifies to the solvency of each fund a readjustment of rates or benefits must be made. The statistics in the first part of this table relate to the Canadian societies reporting to the Insurance Department of the Dominion Government. These numbered 9 in 1936, *viz.*, Alliance Nationale, Ancient Order of Foresters, Artisans Canadiens Français, Canadian Woodmen of the World, Catholic Mutual Benefit Association, Commercial Travellers' Association of Canada, the Grand Orange Lodge of British America, Independent Order of Foresters, and Ukrainian Mutual Benefit Association of St. Nicholas.

Under an amendment to the Insurance Act, effective Jan. 1, 1920, all foreign fraternal benefit societies were required to obtain Dominion authority precedent to transacting business in Canada, but any such societies which at that date were transacting business under provincial licences, while forbidden to accept new members, were permitted to continue all necessary transactions in respect of the insurance of their then members. Most of these societies have since obtained Dominion authority to transact business, also some foreign societies which had not previously been licensed by the provinces. Of both classes of society, 27 transacted business in Canada in 1936, *viz.*, Aid Association for Lutherans, Association Canado-Américaine, Brotherhood of R. R. Trainmen Insurance Department, Catholic Order of Foresters, Commercial Travelers' Mutual Accident Association of America (accident business only), Croatian Fraternal Union, Expressmen's Mutual Life Insurance

Company (which is continuing the business issued by the Expressmen's Mutual Benefit Association), First Catholic Slovak Ladies Union, First Catholic Slovak Union, Jewish National Workers' Alliance, Knights of Columbus, Ladies' Catholic Benevolent Association, Lutheran Brotherhood, Lutheran Mutual Aid Society, Maccabees, Ministers Life and Casualty Union, Modern Woodmen of America, National Fraternal Society of the Deaf, National Slovak Society of U.S.A., Royal Arcanum, Slovene National Benefit Society, Sons of Norway, United Commercial Travelers of America (accident business only), Woman's Benefit Association, Women's Catholic Order of Foresters, Workmen's Circle, and Yeomen Mutual Life Insurance Company (which is continuing the business issued by the Brotherhood of American Yeomen).

16.—Statistics of Insurance of Fraternal Benefit Societies Reporting to the Dominion Insurance Department, 1932-36.

Item.	1932.	1933.	1934.	1935.	1936.
CANADIAN SOCIETIES. (Life Insurance in Canada.)					
Numbers of certificates effected.....	9,661	9,836	16,167	11,382	9,356
Numbers of certificates become claims...	3,272	3,202	3,021	2,907	2,946
	\$	\$	\$	\$	\$
Amounts paid by members.....	2,707,106	2,460,916	2,371,386	1,882,790	1,802,479
Amounts of certificates effected.....	7,447,664	7,895,886	9,760,802	9,335,867	7,343,950
Net amounts in force.....	122,608,742	118,005,740	116,738,500	106,882,394	103,673,283
Amounts of certificates become claims...	2,978,692	2,806,596	2,704,716	2,569,401	2,582,490
Benefits paid.....	3,474,082	3,576,423	3,458,208	3,381,297	3,505,486
Unsettled Claims—					
Not resisted.....	202,585	189,731	217,026	189,672	227,166
Resisted.....	3,500	1,750	7,000	10,000	5,000
Amounts Terminated by—					
Death.....	2,205,094	2,059,143	2,067,427	1,944,665	1,998,792
Surrender, expiry, lapse, etc.....	14,288,153	13,851,151	13,175,227	14,290,452	11,386,571
Totals, Terminated.....	16,493,247	15,910,294	15,242,654	16,235,117	13,385,363
Assets (whole business)—					
Real estate.....	5,494,042	7,033,220	8,585,993	10,397,022	11,193,596
Loans on real estate.....	22,067,172	21,189,642	18,515,117	15,554,444	14,204,277
Policy loans.....	10,381,483	10,382,167	10,255,430	9,694,277	9,075,256
Stocks, bonds and debentures.....	40,649,374	39,673,098	40,877,813	41,510,089	43,744,256
Cash on hand and in banks.....	964,143	768,465	1,287,571	1,597,591	1,398,799
Interest and rent due and accrued.....	1,047,379	1,160,153	1,083,875	875,755	872,229
Dues from members.....	347,324	224,523	358,250	266,475	229,175
Other assets.....	2,562,840	1,755,639	1,547,646	1,387,957	1,227,336
Totals, Assets¹.....	83,513,757	82,186,907	82,511,695	81,283,610	81,944,924
Liabilities (whole business)—					
Claims, unsettled.....	467,986	287,377	328,645	262,719	310,891
Reserves.....	69,184,229	67,413,206	67,004,964	64,959,678	64,861,647
Other liabilities.....	4,764,128	3,672,270	3,808,321	4,386,740	5,339,604
Totals, Liabilities.....	74,416,343	71,372,853	71,141,930	69,609,137	70,512,142
Income (whole business)—					
Assessments.....	5,730,869	5,183,021	5,075,666	4,003,059	3,913,675
Fees and dues.....	471,719	462,595	474,741	1,227,896	1,290,622
Interest and rents.....	3,822,615	3,556,741	3,647,972	3,532,387	3,430,954
Other receipts.....	56,217	98,626	139,281	213,156	373,074
Totals, Income.....	10,081,420	9,300,983	9,337,660	8,976,498	9,008,325
Expenditure (whole business)—					
Paid to members.....	7,379,724	7,460,236	6,503,369	6,619,470	6,589,420
General expenses.....	1,658,318	1,606,328	1,448,178	1,338,747	1,415,766
Other expenditures.....	264,442	124,454	99,045	198,249	160,567
Totals, Expenditure.....	9,302,484	9,191,018	8,050,592	8,156,466	8,165,753
Excess of income over expenditure.....	778,936	109,965	1,287,068	820,032	842,572

¹ The figures given are the book values. The market (or authorized) values of these assets were: \$82,884,579 in 1932, \$80,585,739 in 1933, \$80,058,350 in 1934, \$79,520,428 in 1935, and \$80,619,538 in 1936.

16.—Statistics of Insurance of Fraternal Benefit Societies Reporting to the Dominion Insurance Department, 1932-36—concluded.

Item.	1932.	1933.	1934.	1935.	1936.
FOREIGN SOCIETIES. (Life Insurance in Canada.)					
Numbers of certificates effected.....	4,198	3,199	3,627	4,060	6,023
Numbers of certificates become claims...	760	725	804	937	1,018
	\$	\$	\$	\$	\$
Amounts paid by members.....	1,010,579	936,918	965,081	979,666	1,438,081
Amounts of certificates effected.....	4,308,350	3,569,550	3,437,570	3,836,683	5,350,134
Net amounts in force.....	53,299,968	52,707,770	50,617,201	50,642,333	64,912,851
Amounts of certificates become claims...	769,851	771,704	802,247	926,068	1,114,864
Benefits paid.....	918,553	901,237	1,012,918	1,015,819	1,164,726
Unsettled Claims—					
Not resisted.....	64,253	95,742	69,263	68,877	144,723
Resisted.....	—	—	384	—	—
Amounts Terminated by—					
Death.....	702,685	712,768	660,431	782,952	872,797
Surrender, expiry, lapse, etc.....	7,261,921	5,660,344	5,640,029	4,887,648	5,297,111
Totals, Terminated.....	7,964,606	6,373,112	6,300,460	5,670,600	6,169,908
Assets (Canadian business)—					
Real estate.....	—	—	—	—	—
Loans on real estate.....	6,275	6,275	6,275	6,275	20,250
Policy loans.....	279,866	426,319	463,612	515,440	617,839
Stocks, bonds and debentures.....	2,943,642	3,137,522	3,721,489	4,341,378	5,589,268
Cash on hand and in banks.....	309,433	291,330	278,463	386,155	359,497
Interest and rent due and accrued.....	37,019	37,569	51,981	58,400	70,349
Dues from members.....	115,382	122,136	102,827	108,166	106,625
Other assets.....	—2,572	2	58	179	16
Totals, Assets.....	3,689,045	4,021,153	4,624,705	5,415,993	6,763,844
Liabilities (Canadian business)—					
Claims unsettled.....	91,250	118,079	94,681	94,816	189,947
Reserves.....	8,550,606	9,132,448	9,268,650	9,786,781	10,646,026
Other liabilities.....	32,091	49,586	53,173	81,137	221,596
Totals, Liabilities.....	8,673,947	9,300,113	9,416,504	9,962,734	11,057,569
Income (Canadian business)—					
Assessments.....	1,121,650	1,041,419	1,088,497	1,126,971	1,593,970
Fees and dues.....	246,649	236,640	211,021	179,500	304,217
Interest and rents.....	130,889	139,769	118,186	154,376	190,179
Other receipts.....	8,500	9,913	11,081	12,769	40,159
Totals, Income.....	1,507,688	1,427,741	1,428,785	1,473,616	2,128,525
Expenditure (Canadian business)—					
Paid to members.....	1,061,158	1,003,937	1,113,707	1,140,766	1,304,327
General expenses.....	187,449	159,167	160,640	179,042	218,171
Other expenditures.....	7,162	7,905	7,092	6,379	13,877
Totals, Expenditure.....	1,255,769	1,171,009	1,281,439	1,326,187	1,536,375
Excess of income over expenditure.....	251,919	256,732	147,346	147,429	592,150

Summary of Life Insurance in Canada, 1936.—In addition to the business transacted by life insurance companies registered by the Dominion, a considerable volume of business is also transacted by companies licensed by the provinces. Statistics of these provincial companies have been collected since 1915 by the Department of Insurance. Table 17, showing policies effected and in force, premiums received, and losses paid, in Canada in 1936, summarizes the volume of business done by both life companies and fraternal societies, whether registered by the Dominion or licensed by the provinces.

17.—Dominion and Provincial Life Insurance in Canada, 1936.

Class of Licensee.	New Policies Effectuated (net).	Net In Force Dec. 31.	Net Premiums Received.	Net Claims Paid.
	\$	\$	\$	\$
Dominion Licensees—				
(a) Life companies.....	618,264,819	6,403,037,477	200,541,265	60,433,679
(b) Fraternal.....	12,694,084	168,586,134	3,240,560	3,571,527
Totals for Dominion Companies.....	630,958,903	6,571,623,611	203,781,825	64,005,206
Provincial Licensees—				
(a) Provincial companies within province by which they are incorporated—				
(1) Life companies.....	8,140,400	37,172,383	1,076,426	376,085
(2) Fraternal.....	2,773,122	40,009,581	942,098	1,061,810
(b) Provincial companies in province other than those by which they are incorporated—				
(1) Life companies.....	2,935,709	16,354,021	339,478	72,374
(2) Fraternal.....	3,733,416	36,508,243	667,122	685,268
Totals for Provincial Companies....	17,582,647	130,044,228	3,025,124	2,195,537
Grand Totals.....	648,541,550	6,701,667,839	206,806,949	66,200,743

Summary of Life Insurance in Force Out of Canada by Canadian Companies Registered by the Dominion Government.—Tables 18 and 19 give summary statistics of insurance in force as at Dec. 31, 1936, in currencies other than Canadian, classified by companies and by the currencies in which business was written, respectively. The data are given in Canadian dollars, mainly at par rates of exchange for the countries concerned, but there are several exceptions where, for purposes of account, certain companies have converted foreign currencies at rates other than par, particularly where the current rate differs substantially from the par rate. The major part (over 62 p.c.) of the business was written in United States currency and over 23 p.c. in sterling. From another standpoint, over 32 p.c. was written in currency of British countries outside Canada and nearly 68 p.c. in currencies of foreign countries.

Canadian life companies operating under Dominion registration had, at Dec. 31, 1936, life insurance in force in countries outside Canada amounting to \$2,915,593,936. As shown in Table 19, insurance in force in currencies other than Canadian amounted to \$2,879,656,378. The difference between these figures is presumably the net amount of non-Canadian business transacted in Canadian currency. As against the total non-Canadian business, including annuity business, the foreign investments of Canadian life insurance companies as at Dec. 31, 1936, amounted to \$691,333,950.

Since the business in force in Canada of these companies at Dec. 31, 1936, amounted to \$4,256,850,150, the total business on their books, Canadian and non-Canadian, amounted to \$7,172,444,086. Thus over 40 p.c. of the total business in force was out of Canada. If to this total are added the amounts of life insurance in force in Canadian fraternal benefit societies registered by the Dominion Government (\$103,673,283 of Canadian, and \$98,384,103 of foreign business), the total business of Canadian companies and societies operating under Dominion registration reached the amount of \$7,374,501,472 at the end of 1936. On the assumption that all provincially-licensed companies and societies are Canadian and limit their business to Canada, then, adding the amount of their business in force in Canada (\$130,044,228), the grand total of net insurance in force in Canadian companies and societies, in and out of Canada, would amount to about \$7,504,545,700 at Dec. 31, 1936.

18.—Life Insurance in Force by Canadian Companies¹ Operating under Dominion Registration in Currencies other than Canadian, by Companies, 1936.

NOTE.—Figures are given in Canadian dollars mainly at par rates of exchange.

Company.	Insurance in Force.			Reserves.		
	British Currencies.	Foreign Currencies.	Total.	British.	Foreign.	Total.
	\$	\$	\$	\$	\$	\$
Canada.....	143,697,963	200,927,789	344,625,752	80,473,494 ²	54,566,184 ²	135,039,678 ²
Confederation.....	72,204,425	59,714,866	131,919,291	26,091,682	10,944,546	37,036,228
Continental.....	3,750	62,873	66,623	652	14,188 ²	14,840 ²
Crown.....	18,374,337	32,273,511	50,647,848	1,822,962	2,662,680	4,485,642
Dominion.....	2,316,799	6,846,345	9,163,144	293,845	465,063	758,908
Dominion of Canada.....	739,136	7,500	746,636	27,106	7,171	34,277
T. Eaton.....	19,000	29,000	48,000	6,476	4,877	11,353
Equitable of Canada.....	Nil	875,761	875,761	Nil	121,715	121,715
Great-West.....	Nil	95,397,097	95,397,097	Nil	12,762,499 ²	12,762,499 ²
Imperial.....	16,154,801	27,891,845	44,046,646	3,931,415	6,224,642	10,156,057
London.....	Nil	2,331,593	2,331,593	Nil	379,312	379,312
Manufacturers.....	112,421,473	128,070,195	240,491,668	24,316,607	26,231,894	50,548,501
Maritime.....	2,178,832	96,958	2,275,790	463,544	9,578	473,122
Monarch.....	26,750	10,390	37,140	4,901	1,277	6,178
Montreal.....	596,710	401,891	998,601	1,152	63,224	64,376
Mutual of Canada.....	879,759	12,904,713	13,784,472	123,252	1,950,613	2,073,865
North American.....	320,408	10,013,292	10,333,700	79,876	2,171,478	2,251,354
Northern.....	20,000	178,367	198,367	2,316	29,649	31,965
Sun.....	556,351,743	1,375,316,506	1,931,668,249	222,973,798 ²	279,845,121 ²	502,818,919 ²
Totals.....	926,305,886	1,953,350,492	2,879,656,378	360,613,078²	398,455,711²	759,068,789²

¹ Excluding fraternal benefit societies.

² Includes reserves for annuities with annual payments aggregating: \$4,756,610 for vested and deferred annuities in the case of the Canada Life; \$1,000 for vested annuities in the case of the Continental Life; \$517,947 for vested and deferred annuities in the case of the Great West Life; and \$20,364,605 for vested and deferred annuities in the case of the Sun Life.

19.—Life Insurance in Force by Canadian Companies¹ Operating under Dominion Registration in Currencies other than Canadian, by Currencies, 1936.

Currency.	Insurance in Force.	Reserve.
British—	\$	\$
Pounds—		
Sterling.....	666,846,035	290,990,005
British West Indies.....	14,633,693	4,324,311
Palestine.....	65,074	2,065
South Africa.....	72,583,325	15,191,757
Southern Rhodesia.....	1,347,575	269,150
Dollars—		
British Guiana.....	1,044,680	86,714
British West Indies.....	13,310,340	3,186,786
Hong Kong.....	8,096,295	953,239
Straits Settlements.....	7,910,438	1,938,806
Rupees—		
British India.....	140,468,431	43,670,245
Foreign—		
Cordobas (Nicaragua).....	212,950	38,994
Dollars (China).....	10,760,939	2,768,494
Dollars (Shanghai).....	9,397,765	995,727
Dollars (United States).....	1,799,530,840	360,889,551
Florins (Netherlands).....	1,260,448	144,187
Francs (France).....	633,188	263,569
Francs (Switzerland).....	5,500	527
Guilders (Netherlands).....	10,148,454	2,238,380
Lire (Italy).....	2,630	58
Pesos (Argentina).....	29,041,775	5,255,567
Pesos (Chile).....	4,999,491	1,690,110
Pesos (Colombia).....	557,128	146,895
Pesos (Mexico).....	8,611,752	677,940
Pesos (Philippines).....	14,629,728	3,876,499
Pounds (Egypt).....	14,553,419	2,232,101
Sol Oros (Peru).....	3,939,572	1,277,615
Tails (Shanghai).....	338,650	31,685
Ticals (Siam).....	1,693,951	457,772
Yen (Japan).....	42,944,018	15,463,076
Miscellaneous.....	88,294	6,964
Totals.....	2,879,656,378	759,068,789²

¹ Excluding fraternal benefit societies.

² See footnote 2 to Table 18.

Section 3.—Miscellaneous Insurance.

Since 1875 the growth of insurance business other than fire and life has been steady. The report of the Superintendent of Insurance for the calendar year 1880 shows that the number of companies licensed for the transaction of accident, guarantee, plate glass, and steam boiler insurance—the only four classes of miscellaneous insurance then transacted—was 5, 3, 1, and 1, respectively. The report for the year 1936 shows that miscellaneous insurance in Canada now includes: accident, automobile, aviation, burglary, credit, earthquake, explosion, forgery, guarantee, hail, leakage, live-stock, steam boiler, title, tornado, weather insurance, etc. In 1880, 10 companies transacted business of the miscellaneous kind, but in 1936 such insurance was issued by 235 companies, of which 51 were Canadian, 63 British, and 121 foreign; 179 of these 235 companies also transacted fire insurance. In addition, 16 fraternal orders or societies carried on accident and sickness insurance as well as life insurance business and 2 fraternal orders or societies carried on accident insurance only.

Accident Insurance.—The first licence of this kind was issued to the Travelers' Co., of Hartford, Conn., in 1868. The first licence to a Canadian company was issued to the Accident Insurance Co. of Canada, which was organized in 1872 and commenced business in 1874. In 1927 life companies were empowered to include in life insurance policies additional insurance, payable only in event of death from accident, up to an amount not exceeding the amount payable in event of death from other causes, commonly known as 'the double indemnity benefit'. A large proportion of life insurance policies issued in recent years includes this benefit. Seventy-six companies transacted accident insurance in 1936.

Automobile Insurance.—This is now one of the most important branches of the miscellaneous class of insurance. Premiums increased from \$80,446 in 1910 to \$573,604 in 1915 and to \$18,260,176 in 1930; for 1936 they were \$13,510,431, showing a very slight increase as compared with 1935 and 26.0 p.c. decrease, compared with 1930. There has been an increase in the number of companies from 7 to 149 during the 26-year period.

Plate Glass Insurance.—Policies were first sold in Canada by the Metropolitan Plate Glass Insurance Co., a United States concern, which withdrew from Canada during 1882. The 75 companies operating in Canada in 1936 received premiums of \$465,436 and incurred losses of \$237,257, compared with premiums of \$491,347 and losses of \$240,546 for 1935.

Burglary Insurance.—In 1893 only one company issued burglary policies. A second followed in 1905 and in 1910 five companies were operating, while 74 companies sold this type of insurance during 1936. The premium income of these companies amounted in 1936 to \$1,345,343, and the losses incurred amounted to \$540,325.

Hail Insurance.—Insurance against hailstorms is a class of business of comparatively recent development in Canada. During the year 1936, 33 companies undertook this class of risk, the premiums written amounting to \$815,228, and the losses incurred to \$273,503. The total premiums for the 27 years during which this business has been carried on in Canada amounted to \$68,816,306 and the total losses paid to \$47,079,572.

20.—Insurance by Companies Registered by the Dominion Government to Transact Business other than Fire and Life in Canada, by Classes of Insurance, 1936.

Class of Insurance.	Premiums Received.	Losses Incurred.	Unsettled Claims.	
			Not Resisted.	Resisted.
	\$	\$	\$	\$
Accident—				
(1) Personal.....	3,013,065	1,212,206	577,481	43,035
(2) Employers' liability and workmen's compensation.....	488,449	198,079	867,469	Nil
(3) Other.....	1,649,633	558,321	589,772	8,292
Combined accident and sickness.....	1,845,491	1,099,378	266,614	6,532
Falling aircraft.....	491	Nil	Nil	Nil
Automobile.....	13,510,431	7,618,002	3,816,522	153,960
Aviation.....	30,316	15,474	3,144	Nil
Burglary.....	1,345,343	540,325	103,052	325
Credit.....	171,809	-6,100	132,411	Nil
Earthquake.....	5,397	Nil	Nil	Nil
Explosion.....	38,013	-13	Nil	Nil
Forgery.....	65,129	-8,038	10,708	Nil
Fraud.....	11,955	3,870	595	Nil
Guarantee (fidelity).....	1,092,295	277,448	225,417	9,037
Guarantee (surety).....	761,953	37,122	178,854	136,899
Hail.....	815,228	273,503	3,037	Nil
Inland transportation.....	1,355,814	518,933	165,684	750
Live-stock.....	26,767	18,860	5,734	Nil
Machinery.....	196,665	92,351	14,131	Nil
Personal property.....	130,077	58,167	5,289	Nil
Plate glass.....	465,436	237,257	24,670	Nil
Property.....	11,424	1,547	400	Nil
Sickness.....	1,417,688	926,567	351,301	2,550
Steam boiler.....	438,954	27,161	23,059	Nil
Tornado.....	161,351	61,890	5,278	Nil
Weather.....	6,046	991	100	Nil

21.—Income and Expenditure, and Assets and Liabilities of Canadian Companies Operating under Dominion Registration doing Insurance Business other than Fire and Life, 1936.

Company.	Income.	Expenditure.	Excess of Income over Expenditure.	Assets.	Liabilities. ¹	Excess of Assets over Liabilities.
	\$	\$	\$	\$	\$	\$
Boiler Inspection.....	358,986	351,390	7,596	1,000,510	430,694	569,816
Chartered Trust.....	545,828	470,815	75,013	5,329,420 ²	4,091,213	1,238,207
Confederation Life.....	61,193	47,826	13,367	112,505	15,765	96,740
T. Eaton General.....	14,838	13,978	860	161,673	9,102	152,571
Fidelity Insurance.....	223,811	236,056	-12,245	497,593	183,592	314,001
Guarantee Co. of North America.....	875,522	728,866	146,656	4,971,109	1,556,729	3,414,380
London Life.....	233,935	220,853	13,082	289,292	144,402	144,890
Merchants' Casualty.....	299,477	343,919	-44,442	207,153	158,695	48,458
North American Accident.....	122,997	91,753	31,244	575,617	34,665	540,952
Protective Association.....	340,612	330,402	10,210	321,500	145,344	176,156
Royal Guardians.....	3,091	2,773	318	21,038	11,766	9,272
Totals.....	3,080,290	2,838,631	241,659	13,487,410	6,781,967	6,705,443

¹ Not including capital stock, with trust companies for investment.

² Including \$1,187,243 loans on collateral, and \$9,013 deposits

22.—Income and Expenditure in Canada of Companies, other than Canadian, doing Insurance Business other than Fire and Life, 1936.

Company.	Income.			Expenditure.			Excess of Income over Expenditure.
	Pre-miums.	Interest and Divi-dends Earned.	Total Income.	Net Losses Incurred.	General Expendi-ture.	Total Expendi-ture.	
	\$	\$	\$	\$	\$	\$	\$
Ætna Casualty.....	36,965	4,792	60,633	26,258	25,757	52,015	8,618
Ætna Life.....	61,285	4,905	66,190	40,212	9,701	49,913	16,277
American and Foreign.....	Nil	1,079	1,079	Nil	12	12	1,067
American Automobile Fire...	138,636	Nil	138,636	50,764	60,074	110,838	27,798
American Automobile.....	472,942	127	473,069	236,123	187,732	423,855	49,214
American Credit.....	171,809	13,575	185,384	—6,100	80,718	74,618	110,766
American Surety.....	36,666	5,117	41,783	1,908	18,036	19,944	21,839
Bee Hail.....	15,815	Nil	15,815	6,256	7,080	13,336	2,479
British and Foreign.....	3,653	5,525	9,178	2,800	1,912	4,712	4,466
Continental Casualty.....	574,680	25,788	600,468	298,330	299,665	597,995	2,473
Employers' Reinsurance.....	195,081	5,902	200,983	146,349	83,868	230,217	—29,234
Fidelity and Casualty.....	6,953	Nil	6,953	10,730	8,252	18,982	—12,029
Foncière Transport and Acci-dent.....	562,436	9,504	571,940	360,760	311,458	672,218	—100,276
General Casualty of America.	100,489	6,818	107,307	82,869	68,441	151,580	—44,273
General Casualty of Paris....	362,725	21,035	383,760	237,654	208,277	445,931	—62,171
General Exchange.....	641,970	25,222	670,453	338,437	159,087	497,524	172,929
General Reinsurance.....	Nil	Nil	Nil	Nil	Nil	Nil	—
Great American Indemnity...	53,632	9,250	62,882	26,138	42,498	68,636	—5,754
Hartford Accident.....	177,312	14,028	191,340	85,960	83,360	169,320	22,020
Hartford Live Stock.....	20,729	3,100	23,829	12,560	8,628	21,188	2,641
Hartford Steam Boiler.....	47,533	3,600	51,133	24,503	12,219	36,722	14,411
Indemnity Insurance.....	142,933	12,625	155,558	41,679	73,827	115,506	40,052
International Fidelity.....	4,177	Nil	4,177	—196	1,092	896	3,281
Liberty Mutual.....	Nil	Nil	Nil	Nil	Nil	Nil	—
Loyal Protective.....	189,687	5,766	195,455	111,552	49,908	162,035	33,420
Lumbermen's Mutual Cas-ualty.....	209,734	14,830	224,564	114,534	73,630	228,854	—4,290
Maryland Casualty.....	226,883	Nil	226,883	69,445	111,348	180,793	46,090
Metropolitan Casualty.....	187,600	23,844	211,444	132,938	102,598	235,536	—24,091
Metropolitan Life.....	615,896	15,850	631,756	333,715	155,293	589,020	44,836
Mutual Benefit, Health and Accident.....	201,151	3,756	204,907	86,905	144,334	231,239	—26,332
National Surety.....	50,554	7,633	58,187	70,959	41,043	112,002	—53,815
North West Casualty.....	41,932	2,680	44,612	17,386	17,040	37,429	7,183
Occidental Life.....	16,698	2,645	19,343	18,687	6,228	24,915	—5,572
Ocean Marine.....	Nil	Nil	Nil	Nil	Nil	Nil	—
Prudential Insurance.....	7,394	Nil	7,394	3,401	1,091	5,932	1,462
St. Paul-Mercury.....	52,136	2,500	54,636	27,457	23,039	50,496	4,140
Standard Accident.....	2,219	2,209	4,428	Nil	816	816	3,612
Standard Marine.....	Nil	500	500	Nil	Nil	Nil	500
Tornado Inter-Insurance.....	520	495	1,015	Nil	247	247	768
Travelers' Indemnity.....	401,853	37,756	439,609	138,929	227,906	366,835	72,774
Travelers' Insurance.....	735,278	61,395	796,673	269,518	315,717	585,235	211,438
United Pacific Insurance.....	16,570	813	17,382	21,490	4,011	25,501	—8,119
United States Fidelity and Guaranty.....	548,182	27,075	575,257	216,877	296,911	513,788	61,469
United States Guarantee.....	21,808	Nil	21,808	7,908	10,210	18,118	3,690
Zurich.....	392,749	28,341	421,091	186,195	175,760	361,955	59,136
Totals.....	7,747,265	410,080	8,179,494¹	3,851,890	3,508,826	7,504,607²	674,887

¹ Including \$22,149, sundry income.² Including \$143,891, dividends returned to policyholders.

23.—Dominion and Provincial Insurance in Canada, other than Fire and Life, 1936.

Class of Business.	Dominion Licensees.	Provincial Licensees.			Grand Total.
		(a)	(b)	Total Provincial Licensees.	
		Prov. Cos. within Provinces by which they are Incorp.	Prov. Cos. in Provinces other than those by which they are Incorp.		
	\$	\$	\$	\$	\$
NET PREMIUMS WRITTEN.					
Accident—					
(1) Personal.....	3,013,065	31,094	9,363	40,457	3,053,522
(2) Employers' liability and workmen's compensation.....	488,449	125,577	44,578	170,155	658,604
(3) Other.....	1,649,633	34,030	20,402	54,432	1,704,065
Combined accident and sickness.....	1,845,491	63,787	80,504	144,291	1,989,782
Falling aircraft.....	491	Nil	Nil	Nil	491
Automobile.....	13,510,431	986,914	305,463	1,292,377	14,802,808
Aviation.....	30,316	Nil	Nil	Nil	30,316
Burglary.....	1,345,343	30,882	19,314	50,196	1,395,539
Credit.....	171,809	Nil	Nil	Nil	171,809
Earthquake.....	5,397	Nil	Nil	Nil	5,397
Explosion.....	38,013	Nil	Nil	Nil	38,013
Forgery.....	65,129	316	167	483	65,612
Fraud.....	11,955	Nil	Nil	Nil	11,955
Guarantee (fidelity).....	1,092,295	56,126	11,537	67,663	1,159,958
Guarantee (surety).....	761,953	15,088	29,400	44,488	806,441
Hail.....	815,228	44,860	Nil	44,860	860,088
Inland transportation.....	1,355,814	7,114	7,065	14,179	1,369,993
Live-stock.....	26,767	Nil	Nil	Nil	26,767
Machinery.....	196,665	Nil	Nil	Nil	196,665
Personal property.....	130,077	Nil	Nil	Nil	130,077
Plate glass.....	465,436	54,349	11,228	65,577	531,013
Property.....	11,424	Nil	Nil	Nil	11,424
Sickness.....	1,417,688	2,254	12,096	14,350	1,432,038
Sprinkler ¹	4,782	Nil	Nil	Nil	4,782
Steam boiler.....	438,954	Nil	126	126	439,080
Title.....	Nil	Nil	Nil	Nil	Nil
Tornado.....	161,381	—475	747	272	161,653
Weather.....	6,046	49,870	Nil	49,870	55,916
Totals.....	29,060,032	1,501,786	551,990	2,053,776 ²	31,113,808 ²
NET LOSSES INCURRED.					
Accident—					
(1) Personal.....	1,212,206	17,670	4,119	21,789	1,233,995
(2) Employers' liability and workmen's compensation.....	198,079	89,026	20,436	109,462	307,541
(3) Other.....	558,321	18,307	7,705	26,012	584,333
Combined accident and sickness.....	1,099,378	27,787	34,720	62,507	1,161,885
Falling aircraft.....	Nil	Nil	Nil	Nil	Nil
Automobile.....	7,618,002	624,629	243,997	868,626	8,486,628
Aviation.....	15,474	Nil	Nil	Nil	15,474
Burglary.....	540,325	19,579	4,491	24,070	564,395
Credit.....	—6,100	Nil	Nil	Nil	—6,100
Earthquake.....	Nil	Nil	Nil	Nil	Nil
Explosion.....	—13	Nil	Nil	Nil	—13
Forgery.....	—8,038	3,000	Nil	3,000	—5,038
Fraud.....	3,870	Nil	Nil	Nil	3,870
Guarantee (fidelity).....	277,448	14,233	2,945	17,178	294,626
Guarantee (surety).....	37,122	176	6,183	6,359	43,481
Hail.....	273,503	10,623	Nil	10,623	284,126
Inland transportation.....	518,933	1,180	2,096	3,276	522,209
Live-stock.....	18,860	Nil	Nil	Nil	18,860
Machinery.....	92,351	Nil	Nil	Nil	92,351
Personal property.....	58,167	Nil	Nil	Nil	58,167
Plate glass.....	237,257	36,526	7,004	43,530	280,787
Property.....	1,547	Nil	Nil	Nil	1,547
Sickness.....	926,567	593	678	1,271	927,838
Sprinkler ¹	995	Nil	Nil	Nil	995
Steam boiler.....	27,161	Nil	Nil	Nil	27,161
Title.....	Nil	Nil	Nil	Nil	Nil
Tornado.....	61,890	368	37	405	62,295
Weather.....	991	16,820	Nil	16,820	17,811
Totals.....	13,764,296	880,517	334,411	1,214,928 ³	14,979,224 ²

¹ This business was transacted by a company not holding certificates of registry to transact fire insurance.² Excluding \$1,234,428, premiums of fraternal benefit societies for accident, sickness, and funeral business.³ Excluding \$780,034, losses of fraternal benefit societies for accident, sickness, and funeral business.

Section 4.—Government Annuities.

In the early years of the 20th century, there arose throughout the civilized world a distinct movement in favour of ameliorating the living conditions of the less well-off members of society. One form which this movement took in the United Kingdom was that of old age pensions, granted by the State as a gift to its poorer citizens, whose earnings were very generally insufficient to permit of a margin of saving. In Canada, where wages were higher and a margin of saving was possible, the movement at first took the form of providing, by the establishment of Government annuities, an absolutely safe investment for such savings, which had only too often been lost through the inexperience of their owners, leaving the latter a burden upon the charity of relatives or of the public.* The cost of administering these annuities is borne by the Dominion Government.

Under the Government Annuities Act (c. 7, R.S.C., 1927, amended by c. 33, 1931), His Majesty the King, represented by the Minister (at present the Minister of Labour), may sell to persons over the age of 5 years, domiciled or resident in Canada, immediate or deferred annuities of not less than \$10 nor more than \$1,200 (1) for the life of the annuitant, (2) for a term of years certain, not exceeding 20 years, or for the life of the annuitant, whichever period shall be the longer, or (3) to any two persons domiciled in Canada during their joint lives, and with or without continuation to the survivor. The property and interest of any annuitant in any contract for an annuity is neither transferable nor attachable. As a rule, the purchaser contracts that, in the event of the death of the annuitant before the date fixed for the annuity to begin, all money paid shall be refunded to the purchaser or his legal representatives with interest at the rate of 4 p.c., compounded yearly.

From Sept. 1, 1908, the date of the inception of the Annuities Branch, up to and inclusive of Mar. 31, 1937, the total number of annuity contracts issued was 36,899. Of these contracts, 3,214 have been cancelled, leaving in force on Mar. 31, 1937, 33,685 contracts. The total amount of purchase money received during the same period was \$101,558,694. Table 22 gives the details of annuities contracted for and purchase money received from 1909 to 1937, by years.

* A Dominion-provincial non-contributory scheme of old age pensions, providing for the payment, to persons 70 years or over, of pensions not exceeding \$20 per month, contributed by the Dominion and the provinces which become parties to the scheme, was enacted by c. 35 of the Dominion Statutes of 1927. For further particulars, see pp. 779-781.

24.—Government Annuities Contracted for, and Purchase Money Received, fiscal years ended Mar. 31, 1909-37.

Fiscal Year.	Contracts.	Purchase Money Received.	Fiscal Year.	Contracts.	Purchase Money Received.
	No.	\$		No.	\$
1909 ¹	66	50,391	1924.....	409	1,458,819
1910.....	566	434,491	1925.....	486	1,606,822
1911.....	1,069	393,441	1926.....	668	1,938,921
1912.....	1,032	441,601	1927.....	503	1,894,885
1913.....	373	417,136	1928.....	1,223	3,843,088
1914.....	318	390,887	1929.....	1,328	4,272,419
1915.....	264	314,765	1930.....	1,257	3,156,475
1916.....	325	441,696	1931.....	1,772	3,612,234
1917.....	285	432,272	1932.....	1,726	4,194,384
1918.....	187	332,792	1933.....	1,375	3,547,345
1919.....	147	322,154	1934.....	2,412	7,071,439
1920.....	204	408,719	1935.....	3,930	13,376,400
1921.....	195	531,800	1936.....	6,357	21,281,981
1922.....	277	748,160	1937.....	7,806	23,614,824
1923.....	339	1,028,353			
			Totals.....	36,899	101,558,694

¹ Seven months.

Statistics of the Annuities Fund and value of contracts issued are given in Tables 25 and 26. On Mar. 31, 1937, 14,418 immediate annuities and 19,267 deferred annuities were in force. The total value of these annuities on that date was \$88,224,794 and the amount of annuity under vested contracts in force on that date was \$6,104,298.

25.—Government Annuities Fund Statement, fiscal years ended Mar. 31, 1933-37.

Item.	1933.	1934.	1935.	1936.	1937.
	\$	\$	\$	\$	\$
ASSETS.					
Fund at beginning of year.....	26,582,544	29,163,903	35,023,476	46,906,192	66,441,822
Receipts during the year, less payments..	2,581,359	5,859,573	11,882,716	19,535,630	21,543,114
Fund at end of year.....	29,163,903	35,023,476	46,906,192	66,441,822	87,984,936
LIABILITIES.					
Net present value of all outstanding contracts.....	29,348,141	35,169,533	47,178,019	66,982,654	88,224,794
RECEIPTS.					
For immediate annuities.....	2,473,635	5,292,073	9,904,714	14,881,398	14,883,153
For deferred annuities.....	1,106,542	1,809,924	3,577,200	6,458,204	8,841,716
Interest on fund.....	1,062,640	1,230,751	1,527,547	2,111,374	3,039,106
Refunds.....	804	5,057	3,980	737	-
For amount transferred to maintain reserve.....	289,435	184,238	146,057	271,827	540,832
Totals, Receipts.....	4,933,056	8,522,043	15,159,498	23,723,540	27,304,807
PAYMENTS.					
Payments under vested annuity contracts	2,301,110	2,598,070	3,115,031	4,097,230	5,556,153
Return of premiums with interest.....	17,756	33,842	56,237	33,059	95,496
Return of premiums without interest.....	32,831	30,558	105,514	57,621	110,044
Balance at end of year.....	2,581,359	5,859,573	11,882,716	19,535,630	21,543,114
Totals, Payments.....	4,933,056	8,522,043	15,159,498	23,723,540	27,304,807

26.—Valuation of Annuity Contracts Issued Pursuant to the Government Annuities Act, 1908, as at Mar. 31, 1936 and 1937.

Description of Contract.	1936.			1937.		
	Number of Annuity Contracts.	Amount of Annuity.	Net Value on Mar. 31, 1936, of Outstanding Contracts.	Number of Annuity Contracts.	Amount of Annuity.	Net Value on Mar. 31, 1937, of Outstanding Contracts.
		\$	\$		\$	\$
Immediate annuities.....	6,343	2,653,411	22,499,055	7,528	3,115,463	26,867,095
Immediate guaranteed.....	3,440	1,410,563	16,696,003	4,700	1,962,411	23,542,652
Immediate last survivor....	1,713	811,704	10,041,827	2,190	1,026,424	12,941,387
Deferred annuities.....	14,753	-	17,745,769	19,267	-	24,873,660
Totals.....	26,249	4,875,678¹	66,982,654	33,685	6,104,298¹	88,224,794

¹ Amount of immediate annuities.

It will be seen from the statements above that Government annuities have grown steadily in favour, especially since 1921, the fund reaching a total of \$87,984,936 on Mar. 31, 1937.

CHAPTER XXIV.—COMMERCIAL FAILURES.

According to Sec. 91 of the British North America Act, "the exclusive legislative authority of the Parliament of Canada" extends to bankruptcy and insolvency legislation, and an Insolvency Act (32-33 Vict., c. 16) was actually passed by the Dominion Parliament in 1869, applying to the four original provinces. This Act was in force for four years and was renewed by c. 46 of the Statutes of 1874, while in 1875 a new Insolvency Act (38 Vict., c. 16) applicable to the whole Dominion was passed, but was repealed in 1880. After this there was no Dominion legislation on the subject of bankruptcy until 1919. During the interval of nearly 40 years commercial failures were handled under provincial legislation, and the statistics relating to such failures during this period were compiled and published by Dun's and Bradstreet's commercial agencies. In 1919 a general Dominion Bankruptcy Act was passed (9-10 Geo. V, c. 36). Statistics of commercial failures dealt with under this Act since it came into force in 1920 have been compiled and published by the Dominion Bureau of Statistics. (See p. 978.)

Table 1 below gives summary statistics of industrial and commercial failures in Canada, by classes for 1934, 1935, and 1936 and by classes and provinces, for 1937. At p. 969 of the 1936 Year Book a historical table gives failures for Canada and Newfoundland by classes for the years 1915 to 1935. Early in 1936, however, Dun and Bradstreet, Incorporated, adopted a new method of classification. The principal changes consisted of setting up a new group of construction enterprises previously included in manufacturing and a new class for commercial service. Real estate companies, holding, and other financial companies, and agents of various kinds were dropped. These changes have had the effect of confining the failure records more to industrial and commercial lines of activity, and liabilities are reduced more in proportion to the number of failures since the companies eliminated usually ran high in indebtedness. The present figures of Table 1 are not comparable with those given at p. 969 of the 1936 Year Book, to which the reader is referred for earlier historical data, both because of the above reasons and because the earlier statistics cover Canada and Newfoundland whereas these are for Canada only.

1.—Industrial and Commercial Failures in Canada, by Classes, 1934-37, and by Provinces 1937.

(From Dun and Bradstreet, Incorporated.)

Year and Province.	Manu- facturing.		Wholesale Trade.		Retail Trade.		Con- struction.		Commercial Service.		Totals.	
	No.	Lia- bilities.	No.	Lia- bilities.	No.	Lia- bilities.	No.	Lia- bilities.	No.	Lia- bilities.	No.	Lia- bilities.
		\$'000		\$'000		\$'000		\$'000		\$'000		\$'000
Totals, 1934....	393	6,056	82	2,518	1,068	8,767	63	959	84	751	1,600	19,042
Totals, 1935....	285	5,044	65	1,249	879	5,202	58	689	80	910	1,367	13,094
Totals, 1936....	260	4,459	63	1,454	806	4,331	37	574	72	496	1,238	11,314
1937.												
P.E. Island.....	Nil	-	Nil	-	2	5	Nil	-	Nil	-	2	5
Nova Scotia.....	1	10	1	90	14	57	1	3	1	20	18	180
New Brunswick....	1	20	Nil	-	14	71	Nil	-	Nil	-	15	91
Quebec.....	83	1,071	23	601	232	1,297	17	149	22	123	377	3,241
Ontario.....	76	1,132	19	172	230	917	13	72	21	191	359	2,484
Manitoba.....	12	175	3	27	49	140	1	2	3	20	68	364
Saskatchewan.....	4	11	Nil	-	37	219	Nil	-	1	3	42	233
Alberta.....	4	25	3	14	37	234	Nil	-	Nil	-	44	273
British Columbia...	9	431	2	21	15	101	1	2	Nil	-	27	555
Totals, 1937....	190	2,875	51	925	630	3,041	33	228	48	357	952	7,426

Table 2 summarizes total failures and gives assets and liabilities for such failures, by provinces.

2.—Industrial and Commercial Failures in Canada, by Provinces, 1935-37.

(From Dun and Bradstreet, Incorporated.)

NOTE.—Figures for 1934 will be found at p. 951 of the 1937 Year Book.

Province.	Failures.			Assets.			Liabilities.		
	1935.	1936.	1937.	1935.	1936.	1937.	1935.	1936.	1937.
	No.	No.	No.	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Prince Edward Island.....	10	8	2	53	20	1	107	84	5
Nova Scotia.....	49	36	18	96	68	43	331	239	180
New Brunswick.....	38	16	15	236	76	93	351	127	91
Quebec.....	594	526	377	4,258	2,966	2,159	6,524	5,257	3,241
Ontario.....	442	432	359	2,917	2,863	1,862	3,676	4,090	2,484
Manitoba.....	89	90	68	502	348	229	777	536	364
Saskatchewan.....	38	37	42	157	103	102	194	181	232
Alberta.....	75	53	44	359	323	44	514	334	273
British Columbia.....	32	40	27	436	293	280	620	466	556
Totals.....	1,367	1,238	952	9,014	7,060	4,813	13,094	11,314	7,426

Failures, by Divisions of Industry.—In every year the great majority of the commercial failures of the country are found among the trading establishments, which are so much more numerous than the manufacturing. Thus, according to the records of Dun and Bradstreet, Incorporated, out of a total of 952 commercial failures in Canada in 1937, 630 were among the retail trading establishments, including 189 in foods and 96 in apparel.

Out of the 190 manufacturers who failed, 55 were in the foods business, 41 in textiles, and 20 among manufacturers of forest products. The figures of commercial failures are analysed in detail for the years 1935, 1936, and 1937, in Table 3.

3.—Industrial and Commercial Failures in Canada, by Divisions of Industry, 1935-37.

(From Dun and Bradstreet, Incorporated.)

NOTE.—Figures for 1934 will be found at p. 951 of the 1937 Year Book.

Industry and Division.	Failures.			Liabilities.		
	1935.	1936.	1937.	1935.	1936.	1937.
	No.	No.	No.	\$'000	\$'000	\$'000
Manufacturing—						
Foods.....	58	56	55	873	621	560
Textiles.....	78	84	41	740	988	390
Forest products.....	34	19	20	1,098	250	995
Paper, printing and publishing.....	25	11	14	391	1,017	152
Chemicals and drugs.....	10	8	11	115	33	39
Fuels.....	3	5	2	68	46	11
Leather and leather products.....	17	14	9	242	245	171
Stone, clay, glass and products.....	5	9	5	56	114	174
Iron and steel.....	10	9	2	275	84	10
Machinery.....	7	3	6	481	264	72
Transportation equipment.....	2	8	1	5	73	4
All other.....	36	34	24	700	724	297
Totals, Manufacturing.....	285	260	190	5,044	4,459	2,875

3.—Industrial and Commercial Failures in Canada, by Divisions of Industry,
1935-37—concluded.

Industry and Division.	Failures.			Liabilities.		
	1935.	1936.	1937.	1935.	1936.	1937.
	No.	No.	No.	\$'000	\$'000	\$'000
Wholesale Trade—						
Farm products, foods, groceries.....	25	17	15	556	129	526
Clothing and furnishings.....	4	1	1	41	6	15
Dry goods and textiles.....	3	3	3	7	89	30
Lumber, building materials, hardware.....	2	8	9	63	747	72
Chemicals and drugs.....	5	1	1	233	4	2
Fuels.....	2	2	1	13	19	1
Automotive products.....	1	6	3	6	93	27
Supply houses.....	7	8	4	38	33	36
All other.....	16	17	14	292	334	216
Totals, Wholesale Trade.....	65	63	51	1,249	1,454	925
Retail Trade—						
Foods.....	239	245	189	820	845	563
Farm supplies, general stores.....	92	69	72	671	618	502
General merchandise.....	61	31	31	576	219	186
Apparel.....	146	183	96	978	969	472
Furniture, household furniture.....	18	16	17	134	148	224
Lumber, building materials, hardware.....	46	46	41	392	339	246
Automotive products.....	65	46	37	463	292	326
Restaurants.....	82	74	63	376	226	137
Drugs.....	37	24	21	143	70	101
All other.....	93	72	63	649	605	284
Totals, Retail Trade.....	879	806	630	5,202	4,331	3,041
Construction—						
General contractors.....	22	13	11	230	174	62
Carpenters and builders.....	15	5	4	124	201	34
Building sub-contractors.....	21	19	17	335	199	123
Other contractors.....	Nil	Nil	1	—	—	9
Totals, Construction.....	58	37	33	689	574	228
Commercial Service—						
Cleaners and dyers, tailors.....	12	13	5	58	44	18
Haulage, buses, taxis, etc.....	10	11	10	166	71	171
Hotels.....	22	14	8	417	206	43
Laundries.....	7	4	4	114	18	53
Undertakers.....	7	9	5	37	29	14
All other.....	22	21	16	118	128	53
Totals, Commercial Service.....	80	72	48	910	496	357
Grand Totals.....	1,367	1,238	952	13,094	11,314	7,426

Assignments under the Bankruptcy and Winding Up Acts.—Under the Bankruptcy and Winding Up Acts (R.S.C., 1927, cc. 11 and 213) certain documents relating to assignments have, since 1920, been forwarded to the Dominion Statistician for statistical analysis. Table 4 gives the resulting figures of failures, by provinces, for 1922 and subsequent years, while Table 5 classifies them by branches of business. Table 6 gives the assets and liabilities of the assignors. At the time of going to press, figures for 1937 were not available. A detailed analysis of the 1936 failures, by provinces and branches of business, was made in Table 7, p. 954 of the 1937 Year Book.

4.—Commercial Failures in Canada, by Provinces, calendar years 1922-36.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1922.....	15	121	131	1,589	1,058	284	272	299	156	3,925
1923.....	16	155	87	1,181	970	258	280	323	158	3,408
1924.....	3	69	67	907	835	100	131	150	57	2,319
1925.....	4	71	67	758	721	85	77	139	74	1,996
1926.....	4	83	74	654	655	84	68	113	58	1,773
1927.....	4	66	74	658	681	97	54	135	72	1,841
1928.....	4	90	56	767	758	103	63	126	70	2,037
1929.....	1	71	61	927	762	91	84	101	69	2,167
1930.....	3	61	45	1,011	776	113	146	152	95	2,402
1931.....	7	51	74	795	793	109	152	131	104	2,216
1932.....	9	62	80	968	889	86	91	131	104	2,420
1933.....	10	55	42	935	730	67	59	88	58	2,044
1934.....	8	42	38	779	474	56	36	42	57	1,532
1935.....	4	28	37	632	390	46	66	83	28	1,314
1936.....	6	29	15	589	384	33	57	48	37	1,198

5.—Commercial Failures in Canada, by Branches of Business, calendar years 1924-36.

Year.	Trade.	Manu- fac- tures.	Agri- culture.	Logging and Fishing.	Mining.	Con- struc- tion.	Trans- porta- tion and Public Utili- ties.	Finance.	Service.	Not Classi- fied.	Total.
1924.....	1,317	329	204	14	22	44	36	8	129	216	2,319
1925.....	1,026	403	158	14	15	50	21	5	220	84	1,996
1926.....	805	390	135	27	20	52	34	1	225	84	1,773
1927.....	818	430	116	30	26	63	36	Nil	243	79	1,841
1928.....	884	505	108	31	23	70	45	5	263	103	2,037
1929.....	1,100	443	125	4	11	61	21	5	239	158	2,167
1930.....	1,204	488	115	12	9	55	48	29	283	159	2,402
1931.....	1,102	464	125	5	7	61	42	21	255	134	2,216
1932.....	1,171	468	190	9	6	83	43	7	290	153	2,420
1933.....	1,089	357	92	1	5	57	26	12	246	159	2,044
1934.....	799	217	82	3	2	59	20	16	217	117	1,532
1935.....	594	180	173	3	10	62	11	16	186	79	1,314
1936.....	536	191	123	2	12	53	10	11	189	71	1,198

6.—Estimated Assets and Liabilities of Commercial Failures in Canada, calendar years 1922-36.

Year.	Estimated Grand Total Assets.	Estimated Grand Total Liabilities.	Year.	Estimated Grand Total Assets.	Estimated Grand Total Liabilities.
	\$	\$		\$	\$
1922.....	52,336,488	63,692,219	1930.....	44,048,171	48,164,065
1923.....	62,127,489	61,617,527	1931.....	46,839,179	52,552,900
1924.....	43,194,035	48,105,397	1932.....	40,604,208	51,629,303
1925.....	26,968,371	32,153,697	1933.....	27,033,240	32,953,858
1926.....	24,676,661	32,291,125	1934.....	19,257,469	23,598,260
1927.....	23,197,894	30,634,469	1935.....	12,174,401	17,567,002
1928.....	26,583,462	32,455,437	1936.....	10,703,620	15,144,945
1929.....	32,064,027	38,747,638			

Administration of Bankrupt Estates.—The administration of bankrupt estates is now supervised by the Superintendent of Bankruptcy, appointed in 1932, with the object of conserving as far as possible the assets of bankrupt estates for the benefit of the creditors. Figures from the first report were given at p. 1039 of the 1934-35 Year Book, and those for subsequent years are to be found in later editions. Table 7 shows the details of bankruptcy administration, by provinces, for 1937 together with totals for all years since the first report was published.

7.—Totals of Assets, Liabilities, Assets Realized, and Costs of Administration in Bankrupt Estates Closed, calendar years, 1933-37 and by Provinces, 1937.

(From the Annual Report of the Superintendent of Bankruptcy.)

Year and Province or City.	Estates Closed.	Assets as Estimated by Debtor.	Liabilities as Estimated by Debtor.	Total Realization.	Cost of Administration.	Percentage of Cost.	Paid to Creditors. ¹
	No.	\$	\$	\$	\$	p.c.	\$
Totals, 1933.....	850	9,207,503	8,629,392	1,880,015	423,833	22·6²	1,449,392
Totals, 1934.....	1,620	14,887,298	20,342,883	3,800,996	880,803	23·2	2,908,020
Totals, 1935.....	1,198	14,039,847	19,402,471	2,797,009	763,617	27·3	2,020,868
Totals, 1936.....	1,069	10,314,455	14,018,966	2,265,125	603,182	26·6	1,661,943
1937.							
Prince Edward Island.....	27	104,959	255,036	37,104	9,358	25·2	27,746
Nova Scotia.....	23	123,148	200,579	40,347	14,190	35·2	26,157
New Brunswick.....	2	12,319	14,971	2,004	775	38·7	1,229
Quebec ³	287	6,747,034	7,232,554	1,039,017	227,771	21·9	811,246
Montreal.....	413	5,371,302	5,951,660	631,051	219,150	34·7	411,901
Ontario ³	210	2,307,993	3,500,053	527,475	144,889	27·5	382,586
Toronto.....	82	2,510,785	1,752,987	330,829	98,968	29·9	231,861
Manitoba.....	33	214,286	283,013	52,505	17,355	33·1	35,150
Saskatchewan.....	20	122,713	199,725	30,329	9,394	30·9	20,935
Alberta.....	23	123,469	227,987	33,444	8,392	25·1	25,051
British Columbia.....	29	759,014	812,950	81,638	20,321	24·9	61,318
Totals, 1937.....	1,149	18,397,022	20,431,515	2,805,743	770,563	27·5	2,035,180

¹ In addition to the payments by the trustee, secured creditors valued their security or realized it themselves without the intervention of the trustee to an amount of approximately \$3,579,221. ² Revised since the publication of the 1937 Year Book.

³ Exclusive of the city shown separately.

CHAPTER XXV.—EDUCATION.

Section 1.—Schools, Colleges and Universities.*

The British North America Act assigned public education in Canada, except in the case of the native Indian population, to the jurisdiction of the Provincial Governments. A system of public elementary and secondary education, financed mainly by local school authorities but assisted by provincial grants, has developed in each province. There are some private schools in all provinces (*i.e.*, schools that are not conducted by publicly-elected or publicly-appointed boards, and which are not financed out of public money), but their enrolment is not large in comparison with that of the public schools. At the level of higher education six provinces have each a provincially-supported university, and the remaining three have each one or more colleges supported out of provincial funds, but in most of them there are considerable numbers of students in private, endowed or denominational colleges.

Table 1 of this Chapter gives statistics of enrolment in these different categories of educational institutions: (1) Provincially-Controlled Schools; (2) Privately-Controlled Schools; (3) Dominion Indian Schools; (4) Universities and Colleges. This table corresponds to Table 1 of this chapter as it has appeared in previous Year Books, except that part 'C' of such earlier tables is now omitted. It is followed by subsections treating each of the four groups separately, except Indian Schools, for which data are given in Chapter XXVIII, Miscellaneous Administration, along with other information on Indian Affairs.

Financial Trends.—Chapter I of the Biennial Survey of Education in the United States, published in 1937 by the Office of Education, shows that expenditure for schools and colleges dropped almost exactly 30 p.c. between 1930 and 1934; the comparable drop in Canada was less than 25 p.c. Since 1934 there has been little change in the amount spent for Canadian education; the annual sum has been approximately equal to that of 1926 when the average daily attendance of pupils was about 17 p.c. less. Expenditures by provinces for 1936, or the latest year available, are given in Table 1.

A comparison in dollars can hardly be taken at face value, but it may be of interest to note that the yearly cost of schools and colleges in the United States, after the drop of depression years, is calculated at \$30.51 for each adult in the population; in Canada the comparable figure is about \$22. School and college debt in Canada is about \$45 per adult in the population. It has been reduced somewhat since 1934, but is still around 25 p.c. higher than in 1926.

Rural vs. Urban.—The loss of one-fifth or one-fourth of school revenues would not have been so hard for educational institutions to bear, had it been more evenly distributed among them. A disproportionate share of the loss was generally suffered by rural schools. Complete financial statements are not to be had for rural and

*Revised by J. E. Robbins, M.A., Ph.D., Chief, Education Statistics Branch, Dominion Bureau of Statistics. This Branch is concerned with compiling and publishing comparable data relating to educational institutions throughout Canada, and to this end co-operates with the Provincial Departments of Education. A list of the publications of this Branch will be found in Chapter XXIX, Section 1, under "Education".

urban schools separately in all provinces, but the following statement of teachers' average salaries illustrates the point.

RURAL AND URBAN TEACHERS' POST-DEPRESSION SALARIES EXPRESSED
AS PERCENTAGES OF PRE-DEPRESSION SALARIES.

Province.	Rural.	Urban.
	p.c.	p.c.
Prince Edward Island.....	91.3	99.5
Nova Scotia.....	96.4	99.1
New Brunswick.....	79.5	96.8
Quebec (Protestant).....	73.6	89.3
Ontario.....	72.3	92.8
Manitoba.....	63.2	82.7
Saskatchewan.....	43.2	69.4
Alberta.....	71.8	91.0
British Columbia.....	83.6	88.4

Rural losses as expressed by such salaries were heavier in every case than urban—in most of the provinces very much heavier. Table 4 shows that the average rural salary in a majority of the provinces is less than half of the urban salary, and only in two provinces, British Columbia and Prince Edward Island, is it considerably more than half.

Farm families are substantially larger than town families. Ten average families in rural Canada have 32 children, as compared with 27 in the same number of urban families. Hence, even if the average income of the farmer were equivalent to the average for the city-dweller, it would be harder for him to keep his children at school as long at the same cost per pupil per year, simply because he has more of them, and without taking account of the greater difficulty of bringing children together over country distances to a school.

The problem of rural school support, naturally harder than urban for these reasons, and accentuated of late years by crop failures on the prairies and low agricultural prices generally, continues to be worse than need be in the opinion of educators by reason of the inefficiency of the small administrative and financial unit. From the Atlantic to the Pacific, teachers and others have for some years been carrying on a campaign designed to demonstrate to a somewhat reluctant public the advantages of a large unit. Results have begun to show in the past few years, particularly in Alberta and British Columbia. The former in 1937 has eleven units in operation, and eleven more in process of organization.

Reorganizing the Grades.—A second educational reform much discussed in recent years, and further on the way to adoption than is the larger unit of adminis-

tration, is replacement of the 8-4 division of the curriculum by the 6-3-3 division. The latest programs of study for Nova Scotia, Ontario, Manitoba, Alberta, and British Columbia present the elementary course as one of six years in place of the former eight. Pupils of the next three years, even in the larger cities, with few exceptions, are by no means all segregated in separate school buildings, but there is the unmistakable tendency to treat these years as a unit for curriculum purposes, and even in certain cities where the provincial curriculum has not been re-made on the new plan some schools that were formerly purely elementary are retaining Grade IX pupils and are taking the name of junior high school.

This group of three (in some cases four) intermediate years, has to serve the double purpose of rounding out and completing the formal schooling of a majority of children, and of preparing the remainder for studies in the senior high, technical, or commercial schools. Psychological reasons for making a break at the sixth rather than the eighth grade have become generally accepted. The attachment of an additional year to the former seventh and eighth has a solid basis in the increased length of the average school career. Comparatively few years ago, schooling for the great majority of children ended before the eighth grade but this is no longer so. The dividing line of eight years, as average length of schooling, was crossed in most of the provinces during the 1920's. It is most reasonable that in later years the change should have been recognized by relating one or two more years of schooling closely to the previous eight; in this way the curriculum is rounded off at the point where most school careers actually end.

A natural consequence of the removal of Grade VIII from the status of a turning point in school careers is a reduced use of the entrance-to-high-school examination. Considering together the eight provinces, other than Quebec, practically all students were obliged before proceeding higher, twenty years ago, to pass a standard Departmental examination at the end of Grade VIII. Ten years ago about two-thirds of students were obliged to write the examination, while one-third (by no means a uniform fraction in all provinces) were promoted by their schools. To-day the proportion is quite reversed, about one-fourth writing the examination and three-fourths being recommended. Some of those who do take the examination are under no obligation, but choose to do so in competition for scholarships or prizes. Since the partial adoption of school promotions in New Brunswick in 1936 all of the eight provinces are included in their use, and some use them exclusively.

The reduced use of Grade VIII examinations cannot, however, be entirely attributed, or perhaps not even mainly, to the reorganization of the curriculum, for it started at an earlier date. Moreover, Departmental examinations in Grades IX and X have even more completely disappeared, and they are being partially replaced even at the level of high school leaving. But it will not be possible here to review their story. This has been done in two recent studies to both of which the interested reader is referred: (1) Report of Committee on Examinations, in the *Proceedings of the 17th Convention of the Canadian Education Association*, October, 1936; (2) Examinations in Canada, a chapter in the *Year Book of Education 1938* (Evans Bros.,

London), among chapters on the same subject from other parts of the British Commonwealth.

Interprovincial Exchange.—The new provincial curricula have certain new emphases, such as on health teaching and social studies, in common, partly in line with the latest developments in other countries, but retaining at the same time certain characteristics which are peculiarly Canadian. One of the surprising things to many a new student of provincial school systems in Canada is the similarity they show in spite of their separate origin and independent development. The common features have had less chance of survival since the newer provinces were organized early in the present century, but to offset this there has developed a freer exchange of ideas among provinces and a better acquaintance with one another's problems.

Only two Dominion-wide organizations of educationists antedate the twentieth century, and they only by a few years. The Dominion Education Association, now the Canadian Education Association, was founded in 1892, and the Business Educators' Association of Canada in 1896. Only one other, the National Conference of Canadian Universities in 1911, had its origin before the Great War, but in the years since, more than a dozen have come into existence, each contributing something toward a national outlook on educational problems. Some of the names and dates of formation run as follows: the Canadian Teachers' Federation, and the National Council of Education, 1919; the Canadian School Trustees' Association, 1922; Canadian National Federation of Home and School Associations, 1927; Association of Headmistresses of Canada, 1932; Canadian Physical Education Association; National Federation of Kindergarteners, 1934; Canadian Association for Adult Education, 1935; Headmasters' Association; Workers' Educational Association of Canada; Division of Education and Mental Health in the Canadian National Committee for Mental Hygiene, 1936; Canadian Conference of the New Education Fellowship, 1937. Other national organizations, of which the Junior Red Cross is one of the most conspicuous, have pursued a common program through the schools of all provinces, while yet other groups, *e.g.*, the Federated Women's Institutes, the I.O.D.E., the National Council of Women, have made the schools a subject of leading interest in their national conferences.

The 'education press', with few exceptions, remains essentially provincial rather than national in range, but to some extent the wider picture is interpreted by exchanges, particularly among kindred groups of magazines like those of teachers' federations, trustees' associations, and home and school federations. The Canadian Teachers' Federation has had under consideration for several years the publication of a national magazine, and, while the project has not yet come to fruition, a central news service to all the provincial magazines is conducted.

It is not intended to assess here the extent to which different factors—improved knowledge and acquaintance as between provinces, development from a more or less common root, or geographical and social conditions, for instance—are responsible, but simply to point to the fact that education in the eight mainly English-language provinces tends to continue in these changing times to maintain a common form and content.

1.—Enrolment in and Expenditure on Educational Institutions in Canada, by Provinces, 1936, or Latest Year Reported.¹

Type of Institution.	P.E.I.	N.S.	N.B.	Que.	Ont.
Enrolment—					
Provincially-Controlled Schools—					
(a) Ordinary and technical day schools.....No.	18,183	116,888	92,956	582,257 ¹	673,706
(b) Evening schools.....“	Nil	3,511	1,215	17,434 ¹	27,067
(c) Correspondence courses.....“	Nil	868	Nil	Nil	2,000
(d) Special schools ²“	Nil	406	Nil	1,431	2,298
(e) Normal schools.....“	3	303	351	2,497	1,237
Privately-Controlled Schools—					
(a) Ordinary day schools.....“	547	3,044	3,079	56,628	11,809
(b) Business training schools.....“	175	585	366	3,218	6,790
Dominion Indian schools.....“	20	429	330	1,645	4,664
Universities and Colleges—					
(a) Preparatory courses.....“	517	207	285	13,269	2,259
(b) Courses of university standard.....“	93	2,626	1,236	11,228	18,245
(c) Other courses at university ⁴“	2	8,737	8	6,073	15,204
Totals, Enrolment.....“	19,537	137,604	99,826	695,680	765,279
Population of 1936⁵.....“	92,000	537,000	435,000	3,096,000	3,690,000
Expenditure—					
Provincially-Controlled Schools—					
(a) By Provincial Governments.....\$	343,939	1,148,002	551,573	5,235,005	4,739,116
(b) By ratepayers, etc.....\$	199,170	3,073,363	2,187,780	21,546,923	43,247,348
Privately-controlled schools (estimated).....\$	21,000	130,000	115,000	2,600,000	1,100,000
Indian schools.....\$	1,428	34,319	18,748	85,046	424,636
Universities and colleges.....\$	77,946	1,037,580	386,424	6,612,010	7,135,346
Totals, Expenditure.....\$	643,483	5,423,264	3,259,525	36,078,984	56,646,446
Type of Institution.	Man.	Sask.	Alta.	B.C.	Total.
Enrolment—					
Provincially-Controlled Schools—					
(a) Ordinary and technical day schools.....No.	142,482	217,247	167,193	116,722	2,127,796 ⁶
(b) Evening schools.....“	4,218	1,258	1,109	6,980	62,792
(c) Correspondence courses.....“	3,633	8,274	1,506	4,712	20,993
(d) Special schools ²“	568	124	209	87	5,123
(e) Normal schools.....“	208	713	599	279	6,187
Privately-Controlled Schools—					
(a) Ordinary day schools.....“	5,131	2,003	3,083	4,568	89,892
(b) Business training schools.....“	2,773	873	1,527	1,197	17,504
Dominion Indian schools.....“	2,468	2,266	1,954	3,807	18,033 ⁶
Universities and Colleges—					
(a) Preparatory courses.....“	473	972	319	1	18,302
(b) Courses of university standard.....“	3,212	2,807	2,222	2,916	44,585
(c) Other courses at university ⁴“	1,230	1,056	248	478	33,036
Totals, Enrolment.....“	166,396	237,593	179,969	141,747	2,444,243⁶
Population of 1936⁵.....“	711,056	930,977	772,017	750,000	11,028,050⁷
Expenditure—					
Provincially-Controlled Schools—					
(a) By Provincial Governments.....\$	988,434	1,613,960	1,432,085	2,654,885	18,706,999
(b) By ratepayers, etc.....\$	6,225,991	5,765,093	7,929,401	5,802,969	95,978,038
Privately-controlled schools (estimated).....\$	341,000	109,000	213,000	340,000	4,969,000
Indian schools.....\$	216,723	371,447	319,582	408,494	1,936,744 ⁸
Universities and colleges.....\$	898,094	1,021,132	903,703	696,067	18,768,302
Totals, Expenditure.....\$	8,670,242	8,880,632	10,797,771	9,902,415	140,359,083⁹

¹ The first two items for Quebec are for 1934-35; all others in the table for 1935-36, but Ontario elementary figures in years previous to 1935 have been for the calendar year, not for the school year, hence have included over 40,000 duplications which are now removed.

² Schools for the blind, deaf, or mentally defective. These are boarding schools, and many of the pupils are from a province other than the one in which they are at school.

³ Included with "Universities and Colleges—Preparatory Courses". ⁴ Includes also those in the Departmental summer schools for teachers in Ontario and British Columbia, not held at universities or colleges.

⁵ Official estimate, see p. 155. ⁶ Includes 162 in ordinary day schools and 450 in Dominion Indian schools for Yukon and the Northwest Territories. ⁷ Includes 14,000 estimated population for Yukon and the Northwest Territories. ⁸ Includes \$56,321 for Yukon and the Northwest Territories, under "expenditure".

Subsection 1.—Provincially-Controlled Schools.

An outline of the provincial systems of school administration was given on pp. 960-962 of the 1937 Year Book, and is not repeated in this edition.

A table at p. 963 of the 1937 Year Book included the record of annual enrolment by provinces since 1911, together with the record of average daily attendance shown in Table 2 below. Figures of both enrolment and attendance for years earlier than 1911 were published on pp. 839-840 of the 1932 Year Book. The record of average daily attendance is the more comparable one, as between provinces, and probably the more significant for most purposes. Both figures have been practically at a standstill, or declining, in all provinces except Quebec, for several years, due to the annually decreasing number of younger children entering the schools. The decrease would be much more pronounced but for the tendency for older children to remain in school longer. The extent of this latter trend was indicated on pp. 956-957 of the 1937 Year Book.

2.—Historical Summary of Average Daily Attendance in Provincially-Controlled Schools, by Provinces, 1911-36.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1911...	10,511	61,250	42,791	301,678	305,648	45,303	38,278	32,556	32,517	870,532
1912...	10,916	63,640	43,685	314,520	323,358	46,500 ¹	49,329	39,226	37,384	928,558 ^{1,2}
1913...	11,003	65,686	44,375	324,447	340,223	48,163	56,005	45,888	43,072	978,862
1914...	11,170	66,599	44,534	344,657	357,519	58,778	65,009	54,582	49,090	1,051,938
1915...	11,694	70,361	47,889	360,897	367,959	68,250	72,113	61,112	52,494	1,112,769
1916...	11,347	69,227	48,069	373,754	366,891	66,561	71,522	60,271	50,880	1,118,522
1917...	11,319	70,118	46,860	367,868	371,129	69,209	88,758	65,374	52,577	1,143,212
1918...	11,334	67,923	46,515	369,426	382,506	69,963	91,010	68,489	54,748	1,161,919
1919...	10,908	65,906	45,797	370,710	391,539	72,072	98,791	74,776	56,692	1,187,191
1920...	10,991	66,442	46,950	379,319	398,264	88,563	101,355	82,417	59,791	1,234,092
1921...	11,446	78,238	49,714	401,655	450,656	86,137	113,412	89,401	68,597	1,349,256
1922...	12,338	79,410	51,668	426,466	475,591	95,433	119,041	100,515	75,528	1,435,990
1923...	11,763	83,472	53,745	426,935	482,068	98,787	130,499	103,612	77,752	1,468,633
1924...	11,783	79,509	58,366	430,185	496,673	103,775	139,782	104,003	79,262	1,503,338
1925...	12,259	80,318	58,397	443,741	508,044	104,312	144,650	105,978	82,721	1,540,420
1926...	11,823	80,446	58,731	448,252	512,175	106,809	152,430	108,881	85,293	1,564,840
1927...	11,777	81,426	61,070	452,757	528,485	106,793	157,392	112,401	88,306	1,600,407
1928...	12,123	82,591	62,205	461,228	535,691	114,270	157,207	116,245	91,760	1,653,320
1929...	12,144	84,275	63,312	468,537	583,334	116,766	161,658	120,229	94,410	1,704,665
1930...	12,201	85,080	65,726	478,682	592,265	117,037	169,893	129,371	96,196	1,746,451
1931...	12,721	87,418	70,856	502,890	597,164	120,703	176,716	134,112	99,375	1,801,955
1932...	13,119	89,513	71,423	518,921	606,867	122,843	176,916	136,711	103,510	1,839,823
1933...	13,810	93,866	72,204	525,215	614,357 ²	121,190	175,002	137,558	104,978	1,858,180 ²
1934...	13,399	93,294	72,109	542,355	611,000 ^{1,2}	120,314	175,457	139,155	103,408	1,870,491 ^{1,2}
1935...	13,496	90,565	70,757	539,441	609,269	117,379	175,323	136,202	104,824	1,857,256
1936...	13,140	92,279	71,132	539,441 ³	601,758	115,671	164,104	132,725	101,873	-

¹ Approximate.

² Revised since the publication of the 1937 Year Book.

³ Not available.

For the year 1936 a record of the age distribution of pupils in the provincially-controlled schools of all provinces has been made available for the first time. This tabulation is presented in Table 3. The ages of boys and girls are not shown separately, and it should be mentioned that there is a definite tendency for boys to leave school at younger ages than girls. A table at p. 964 of the 1937 Year Book showed the comparative numbers of boys and girls in the secondary grades of eight provinces.

3.—Age Distribution of Pupils in Provincially-Controlled Schools, by Provinces, 1936.

Age.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
5 years or under	260	1,468	9,382	64,038	14,084	616	1,320	294	73
6 "	1,040	6,664			39,976	8,267	10,691	7,351	4,837
7 "	1,539	9,878	8,911	472,490	59,008	12,174	19,512	14,914	9,470
8 "	1,798	10,928	9,161		63,873	13,095	20,726	15,531	9,840
9 "	1,750	10,751	9,144		62,240	13,262	21,131	14,980	10,010
10 "	1,790	11,272	9,780		65,740	13,587	20,696	15,735	10,418
11 "	1,804	11,293	9,111	69,436	66,429	13,742	21,093	15,919	10,608
12 "	1,871	11,224	9,157		66,686	14,430	21,287	15,767	10,986
13 "	1,810	11,128	8,625		64,599	14,524	20,926	16,411	11,071
14 "	1,741	10,862	6,960		55,833	13,806	20,874	15,962	11,500
15 "	1,297	8,929	4,998	24,421	46,918	10,707	15,614	13,686	10,267
16 "	764	6,394	2,842		29,657	7,512	9,857	8,192	7,845
17 "	375	3,401	1,595	4,441	18,016	4,186	6,054	5,380	4,763
18 "	114	1,720	815		11,181	1,765	3,674	3,692	2,581
19 "	22	673	320		5,656	552	1,849	2,050	956
20 "	7	194	127		2,333		786	786	288
21 years or over.	4	109	78		1,477	257	746	543	115
Totals, Classified	17,986	116,888	91,006	634,826	673,706	142,482	216,836	167,193	115,628
Unclassified.....	197	Nil	1,950	Nil	Nil	Nil	411	Nil	1,094

Technical Education.—Recent editions of the Year Book have mentioned the tendency in post-war years toward diversity of instruction at the secondary level. It will be of interest to note here the extent to which communities of various sizes have made provision for technical and commercial instruction.

Among the 35 cities in Canada with populations of more than 20,000, there are 9 without day technical schools. Three of these—Verdun, Outremont and Westmount—are within reach of the Montreal Technical School. The others in order of size are Winnipeg, Halifax, Sherbrooke, Sydney, Glace Bay, and Moncton, the last four being among the smaller cities of the group. Evening technical classes are held in practically the same number of larger cities, though not the same cities, those without them in this case being all in Ontario and Quebec.

Among the 103 cities with populations between 5,000 and 20,000 about one-fourth have day technical schools and a similar number have evening technical classes. In smaller centres day schools are extremely rare, considering that there are nearly 400 places with populations of between 1,000 and 5,000, and only half a dozen schools among them. A considerable number, however, provide evening instruction of a technical character.

As information is not available concerning the number of centres offering commercial instruction in Quebec, reference can be made only to eight provinces. The chief difference to be noted, in comparison with the coverage of other technical instruction, is that approximately twice as many towns and smaller cities include commercial courses in their high schools. There are privately-owned business schools in quite a number of others, although they too are unusual in places with a population smaller than 5,000.

The number of centres offering evening classes of a technical nature has declined very considerably in the past few years, and attendance at such classes has fallen by one-third. Enrolment in day technical schools has changed little for several years (an interesting situation in view of the fact that the academic high school enrolment has continued to increase at the same time) probably due to the technical schools being filled to capacity with no money available for their extension.

Over a ten-year period technical students have increased proportionately more than academic students. They have approximately doubled while the others have increased by less than one-half. Even so, in the eight provinces only about one high school student in five is following a technical course.

Technical enrolment includes a number of part-time students in training under provincial Apprenticeship Acts, an arrangement that seems to be regarded with favour. Ontario has had an Apprenticeship Act since 1928, under which boys learning the building trades have received their training partly in industry and partly in the technical schools; in 1936 the scope of the Act was extended to include barbering, hairdressing, and the automobile repair trade. A similar plan has been operated in British Columbia in the building trades since 1930, and an Apprenticeship Act was passed by the Nova Scotia Legislature in 1937.

In addition to the arrangements for apprenticeship that are being systematized under provincial statutes, it appears that a growing number of industrial companies are practising plans, of their own arrangement or in conjunction with private correspondence schools, for the technical training of their younger employees. Some of the country's largest railway, mining, and paper companies, as well as other manufacturing establishments, have such plans in operation.

High schools where the only technical course is agricultural are not included in the foregoing references. The total number of schools in Canada that would be called agricultural high schools, in the sense that the term technical high school is used, is less than a dozen, but some of the provinces provide considerable agricultural instruction in the regular courses for school leaving, normal entrance, or matriculation. About one-third of the academic secondary schools in Ontario (collegiate institutes, high and continuation schools) have agricultural classes. The 'ruralization' of teaching in Quebec schools has received emphasis in recent years. Available information, however, does not permit of a tabulation which would convey a reliable impression of the extent of agricultural education in the ordinary schools of the several provinces together.

There are residential agricultural schools (other than agricultural colleges) with one- or two-year courses as follows: two in Alberta, one in Ontario, and two in Quebec. They serve much the same purpose as the diploma course in agricultural colleges which are held at one centre in each province, except in Quebec where there are three, and in the two smallest provinces, New Brunswick and Prince Edward Island, where there is none. These boarding schools for the teaching of agriculture remain rare in Canada as compared with some other agricultural countries. Denmark, with a population about equal to Ontario's, has 21 such schools with an attendance of from 2,500 to 3,000, in addition to 59 folk high schools (also residential institutions) with an attendance of 6,500 drawn mainly from farm young people. The total enrolment in agricultural boarding schools in all Canada, including the diploma course at agricultural colleges as well as the other five schools, is about 800.

For no other occupation, however, with the possible exception of homemaking, do Governments in Canada conduct so many educational services outside of the schools as for agriculture. Short courses by provincial Mines Departments for prospectors have been attended by nearly 5,000 men in a year lately, but short courses for farmers, their wives and children, varying in length from a few days to a few weeks, are attended each year by several times this number. And courses are by no means the only type of educational service sponsored by the Extension Branches of Departments of Agriculture and agricultural colleges. One other vari-

ety alone, the organization of boys' and girls' farm clubs, includes more than 30,000 young people. A review of the various types of service is not possible in short space and will not be attempted here.

Teaching Staffs.—The teaching staffs of day schools under provincial control in Canada consisted in 1936 of 73,291 teachers, 18,424 males and 54,867 females. Practically all of the increase of 3,500 in teachers since 1930 has been in the male class. The "Annual Survey of Education in Canada, 1936" deals in detail with the classification of these teachers, the rates of salary paid and the teaching experience. Table 4 summarizes statistics regarding rates of salary for rural and urban teachers in recent years.

4.—Average Annual Salaries Received by Teachers in Rural and Urban Schools, by Provinces, 1926 and 1930-36.

Item.	1926.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Prince Edward Island—								
Rural schools.....	508	555	527	523	507	490	480	481
Urban schools.....	744		771	771	779	783	770	767
Nova Scotia—								
Rural and village schools.....	535	543	556	552	546	531	531	536
Urban schools.....	887	1,080	1,086	1,104	1,071	1,032	1,046	1,077
New Brunswick—								
Rural schools.....	795	798	640	652	538	452	497	509
Urban schools.....			1,224	1,233	1,172	1,124	1,166	1,185
Quebec— ¹								
Roman Catholic schools—								
Brothers and nuns.....	423	435	442	444	432	430	416	2
Lay teachers.....	468	523	538	539	512	481	458	2
Protestant schools—								
Lay teachers.....	1,176	1,292	1,305	1,330	1,318	1,265	1,144	2
Ontario—								
Public schools—								
Rural.....	987	1,036	974	897	764	2	744	740
Urban.....	1,458	1,499	1,529	1,517	1,438	2	1,508	1,471
Roman Catholic Separate schools—								
Rural.....	818	889	877	849	749	2	741	760
Urban.....	687	762	781	731	743	2	739	715
Collegiate institutes—Urban.....	2,580	2,688	2,716	2,727	2,638	2,449	2,457	2,449
High schools—Urban.....	2,100	2,188	2,243	2,206	2,080	1,831	1,798	1,759
Continuation schools—Urban.....	1,545	1,156	1,570	1,577	1,454	1,272	1,242	1,214
Vocational schools—Urban ⁴	2,571	2,600	2,572	2,586	2,576	2,413	2,456	2,434
Manitoba—								
Rural.....	1,208	1,217	951	915	822	529	620	601
Urban.....			1,567	1,423	1,258	1,252	1,258	1,297
Saskatchewan—								
Rural.....	1,017 ⁵	1,076	863	861	620	506	465	2
Urban.....	1,292 ⁵	1,316	1,289	1,277	1,125	969	914	2
Alberta—								
Rural.....	1,034 ⁵	1,059	1,018	927	842	738	723	731
Urban.....	1,584 ⁵	1,507	1,533	1,614	1,414	1,418	1,369	1,395
British Columbia—								
Rural districts.....	1,110	1,151	1,135	1,086	1,011	945	940	949
District municipalities.....	1,419	1,338	1,378	1,337	1,104	1,106	1,117	1,135
Cities.....	1,648	1,788	1,813	1,703	1,297	1,292	1,577	1,600

¹ Not entirely classified as rural and urban to school year.

⁴ Full-time teachers.

² Not available.

⁵ 1927 figures.

³ Changed from calendar

Financial Statistics.—Tables 5 and 6 present records of the finances of the boards operating the provincial schools, in a comparable way, in so far as this can be done with existing records. Similar tables in the 1937 Year Book presented this information for all years since 1926, and in the 1936 Year Book for all years since 1914.

5.—Financial Support of Provincially-Controlled Schools in Canada, by Provinces, 1926, 1931, and latest years.

NOTE.—The receipts shown in the following table do not include any amounts raised by loans, or the sale of bonds or debentures, as all revenue of this nature must be repaid ultimately with money raised by local taxation. With the exception of the Maritime Provinces, for which the information is not available, the total debenture indebtedness of the schools of each province is given annually, thus showing the net increase or decrease per year. Figures for intervening years will be found at pp. 967-969 of the 1937 Year Book.

Province and Fiscal Year.	Government Grants.	Taxation within School Administrative Units.	School Board Revenue from Counties.	Total Current Revenue Recorded. ¹	Debenture Indebtedness.	Administrative Units Operating Schools.
	\$	\$	\$	\$	\$	No.
Prince Edward Island—						
1926.....	242,336 ²	171,650	Nil	413,986	}	469
1931.....	258,905 ²	189,444	Nil	448,349		469
1936.....	265,723 ²	199,172	Nil	464,895		473
1937.....	269,379 ²	181,236	Nil	450,615		475
Nova Scotia—						
1926.....	365,219 ²	2,393,155	497,229	3,255,603	}	1,704
1931.....	509,462 ²	2,657,780	493,533	3,660,775		1,714
1935.....	631,233 ²	2,604,137 ³	483,185	3,718,555 ⁵		1,722
1936.....	650,606 ²	2,556,905	482,398	3,689,909		1,719
1937.....	663,421 ²	2,590,733	477,265	3,731,419		1,721
New Brunswick—						
1926.....	511,350 ²	2,263,082	213,066	2,987,498	}	1,459
1931.....	459,029 ²	2,467,510	210,500	3,137,039		1,483
1936.....	462,182 ²	1,964,287	223,493	2,649,962		1,518
1937.....	505,021 ²	2,077,475	224,451	2,806,947		1,540
Quebec—						
1926.....	993,509	15,647,512	Nil	17,271,783	50,413,950	1,800
1931.....	1,429,033	18,697,183	Nil	20,742,951	65,886,105	1,827
1935.....	1,137,886	19,002,389	Nil	20,735,404	82,919,989	1,859
1936.....	1,316,019	18,575,530	Nil	20,548,403	79,556,117	1,860
Ontario—						
1926.....	4,775,853	30,903,925 ⁴	1,774,592	37,605,519	71,061,955	} 6,600 (approx.)
1931.....	6,276,666	39,544,376 ⁴	3,100,225	49,351,714	88,781,934	
1935.....	4,739,116	33,548,155 ⁴	2,195,651	40,482,922	79,570,591	
Manitoba—						
1926.....	1,091,151	7,302,044 ⁴	Nil	8,393,195	14,790,474	1,862
1931.....	1,310,587	7,675,879 ⁴	Nil	8,986,466	15,006,997	1,938
1937.....	972,277	6,091,895 ⁴	Nil	7,064,172	14,590,064	1,892
Saskatchewan—						
1926.....	2,265,481	10,696,154	Nil	13,111,829	11,933,064	4,525
1931.....	2,704,242	8,114,719	Nil	11,015,486	15,945,934	4,796
1935.....	1,613,960	6,075,000	Nil	7,845,354	13,526,765 ⁵	4,923
1936.....	1,638,417	6,307,000	Nil	8,106,904	13,999,736	4,938
Alberta—						
1926.....	1,137,638	8,241,715	Nil	9,491,130	10,704,634	3,124
1931.....	1,511,776	8,931,880	Nil	10,599,204	12,026,157	3,395
1935.....	1,432,085	7,489,823	Nil	9,063,248	9,883,239	3,492
1936.....	1,390,238	7,540,419	Nil	9,065,132	9,359,594	3,542
British Columbia—						
1926.....	2,380,668	5,095,420	Nil	7,476,088	12,101,417	746
1931.....	2,856,376	6,226,661	Nil	9,083,037	15,936,753	811
1935.....	2,175,619	5,623,115	Nil	7,798,734	14,922,884 ⁵	762
1936.....	2,270,466	5,802,969	Nil	8,073,435	14,631,839 ⁵	773
1937.....	2,456,372	6,315,902	Nil	8,772,274	"	763

¹ Includes tuition fees where these are recorded.

² Includes contributions to teachers' salaries in the Maritime Provinces; and in New Brunswick, grants made to schools by the Vocational Education Board.

³ Record not available.

⁴ The Ontario figures include the township grant towards the salaries of rural public school teachers. In the rural municipalities of Manitoba about three-fifths of the school support is equalized by a uniform rate levied over the whole municipality.

⁵ Revised

since publication of the 1937 Year Book.

6.—Expenditures of School Boards, by Provinces, 1926, 1931 and 1936, or latest year.

NOTE.—All amounts in even thousands are estimates. Figures for intervening years were given at p. 969 of the 1937 Year Book.

Province and Fiscal Year.	Teachers' Salaries.	Buildings, Grounds and Permanent Improvements.	Interest on Debentures and Other Loans.	Equipment, Repairs, Fuel and all Other Expenses. ¹	Total. ¹
	\$	\$	\$	\$	\$
Prince Edward Island.....					
Nova Scotia.....	2	2	2	2	2
New Brunswick.....					
Quebec—					
1926.....	9,099,785	2,433,047	2,721,293	5,919,287	20,173,412
1931.....	11,130,976	5,969,843	3,371,340	7,936,447	28,408,606
1935.....	11,023,731	3	4,100,000	8,504,364	23,628,095
1936.....	11,150,922	3	4,200,000	7,764,165	23,115,087
Ontario—					
1926.....	25,167,571	5,463,159	3,396,000	7,935,000	41,961,730
1931.....	30,490,962	5,148,123	4,328,000	10,739,094	50,706,179
1933.....	27,405,768	926,673	4,407,000	9,291,393	42,030,834
Manitoba—					
1926.....	4,914,087	419,047	681,643 ⁴	2,184,409	8,199,186
1931.....	5,387,400	795,143	693,704 ⁴	2,290,757	9,167,004
1937.....	4,057,103	285,375	614,176 ⁴	1,936,489	6,893,143
Saskatchewan—					
1926.....	7,438,095	1,688,015	3,350,490		12,476,600
1931.....	7,358,024	1,022,655	3,052,489		11,433,168
1936.....	4,501,859	481,621	2,560,567		7,544,047
Alberta—					
1926.....	5,640,219	1,051,627 ⁵	654,000	2,188,336	9,534,182
1931.....	6,741,826	537,555 ⁵	758,000	2,325,678	10,363,059
1934.....	5,613,781	435,535	664,000 ⁶	2,059,097	8,772,413 ⁶
1935.....	5,668,088	477,928	628,000	2,054,721	8,828,737
1936.....	5,664,072	525,448 ⁵	583,000	2,137,270	8,909,790
British Columbia.....	2	2	2	2	2

¹ Excluding all payments on principal of debentures, etc. ² Not available. ³ Included under the heading, "Equipment, repairs, etc." ⁴ In Manitoba, interest on debentures only. ⁵ In Alberta repairs are included under this heading. ⁶ Revised since publication of the 1937 Year Book.

Subsection 2.—Private Schools.

Private Elementary and Secondary Schools.—There are numerous schools in each province doing work similar to that of the ordinary provincially-controlled schools, but which are not publicly financed or administered and hence are not included in Subsection 1 (except in Quebec). Except in Quebec, the private schools have from about 2 to 4 p.c. of elementary and secondary pupils in the different provinces. In Quebec the proportion is about 10 p.c., but most of them are subsidized by the Provincial Government and provincial reports include a record of them similar to, and in some cases (as of average daily attendance) inseparable from, the records of publicly-controlled schools. Thus their statistics are of necessity included in Subsection 1. Table 7, however, shows their enrolment quinquennially since 1921, the year in which the Education Branch of the Dominion Bureau of Statistics commenced the collection of reports from private schools. A directory of the schools is included in the "Annual Survey of Education, 1936".

7.—Enrolment in Private Elementary and Secondary Schools in Canada, by Provinces, 1921, 1926, 1931, and 1936.

NOTE.—Figures for intervening years were given at p. 970 of the 1937 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1921.....	682	3,047	2,607	54,671	9,961	3,149	1,608	2,274	3,159	81,158
1926.....	580	2,956	3,528	54,767	10,126	4,534	2,358	2,281	4,624	85,754
1931.....	570	2,746	4,082	57,320	12,236	5,864	2,853	2,944	5,276	93,891
1936.....	547	3,044	3,079	55,775	11,809	5,131	2,003	3,083	4,568	89,039

Business Colleges.—There are private schools in fields of education other than elementary and secondary, the most numerous group working in the field of business and commercial education. A record of enrolment from this group also has been collected by the Education Branch of the Dominion Bureau of Statistics since 1921; a summary of this information is presented in Table 8.

8.—Enrolment in Private Business and Commercial Schools (Business Colleges) in Canada, by Provinces, 1921, 1926, 1931, and 1936.

NOTE.—Figures for intervening years were given at p. 971 of the 1937 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1921.....	85	1,280	740	4,319	14,537	3,538	1,333	2,216	1,986	30,034
1926.....	114	766	722	2,743	10,314	3,502	1,436	2,739	2,230	24,566
1931.....	140	775	671	2,807	9,732	3,087	1,400	1,629	2,180	22,421
1936.....	175	585	366	3,218	6,790	2,773	873	1,527	1,197	17,504

Subsection 3.—Higher Education.

Previous editions of the Year Book have included considerable current information on universities and colleges, concerning enrolment, graduates, teaching staffs, and finances. For example, pp. 971 to 978 of the 1937 Year Book presented the enrolment and graduates of individual schools of higher education for the year 1934-35 and, furthermore, referred to previous editions of the Year Book in which statistics regarding the finances, staffs, etc., of these institutions were presented. The necessity to economize space in the Year Book has made it impossible to continue to give detailed statistics of this nature, more especially since they are now adequately treated in the "Annual Survey of Education in Canada", published by the Dominion Bureau of Statistics. The interested reader is referred to the latest edition, that for 1936.

Available space this year is devoted to a retrospective view of the work of these institutions since 1920, the year in which preparation of records of higher education was begun by the Education Branch of the Dominion Bureau of Statistics.

The record of graduates in Table 9 shows that there has been an increase of about 50 p.c. in the annual number of university graduates since 1923 or 1924, when the abnormalities of enrolment resulting from the War mainly disappeared. By studying the figures in relation to the total population of the country at university age, it is found that nearly 3 p.c. of the young people growing up in Canada to-day become university graduates—about 4 p.c. of the young men and 1.5 p.c. of the young women. The proportion receiving degrees in Arts or Science is now nearly

double that of fifteen years ago, but in several of the other faculties the proportion has not increased at all, and in some has definitely fallen. The annual supply of professional workers, as represented by these records of graduation in the several faculties, was studied in relation to the requirements for maintaining the existing ratio of professionals in the total population, in a special bulletin of the Education Branch issued in 1937.

This bulletin, *Supply and Demand in the Professions in Canada*, shows that Canadian universities have been further short of training the number of workers required in engineering and allied professions than in most others. Native-born Canadians constitute few more than half of the mining, mechanical and electrical engineers, designers, draughtsmen and architects in the country, and only about two-thirds of civil engineers, surveyors, chemists, assayers and metallurgists. Much the greatest outside source of supply has been the British Isles, while the United States has supplied larger numbers than the continent of Europe.

It has been shown by health professionals that the population per doctor is greater now than a generation ago, is nearly double in some provinces what it is in others, and is more than double in cities what it is in smaller communities and their surrounding rural areas. The population per dentist is now only about 2,500 where as it was 4,000 thirty years ago, but the rate at which dentists have been graduated in recent years has not been nearly fast enough to maintain the existing ratio. Health of animals engages fewer professionals, *i.e.*, veterinaries, than twenty years ago, although the number of live stock is much greater now.

Clergymen represent another main professional group in which it seems doubtful whether the supply is being maintained. Teachers, on the other hand, are more numerous than required, particularly in view of the fact that a smaller child population each year reduces the demand for their services. The equivalent number of all new teaching positions for several years have been taken by men. University courses in librarianship have as yet attracted few men.

The supply from the universities in law and pharmacy seems to retain a closer relationship to requirements than in the occupations just mentioned, perhaps, in a measure, because part of the training is taken in the employ of a graduate lawyer or druggist, the number of entrants thus depending in some measure on the number practising. In many of the less clearly defined or numerically less important professions it is not possible to trace the adequacy of the rate of supply with existing sources of information.

Table 9 shows that there has been no tendency in post-war years for women to increase their enrolment in such professional lines of study as medicine, dentistry, pharmacy, law, theological, or missionary courses. A few appear in the record of every branch of study into which enrolment can be divided, except forestry, but they have held in the main to Arts, including Science and Commerce, and to Education, Social Service and Public Health. Altogether they constitute about one-fourth of university graduates, but their proportion of the total has not tended to increase noticeably since the abnormal enrolment of returned soldiers came to an end in the early 1920's. Their proportion is highest in Ontario and the western provinces.

In this connection it is of interest to recall that university education for women in Canada began only within the lifetime of the older generation women still living. The centenary of university education for women was celebrated in the United States recently, the original event having been the admission of four young women to the post-matriculation course at Oberlin College, Ohio, in the autumn of 1837, but according to the archives of the Canadian Federation of University Women, it

was not until about 40 years later that women were first admitted to a university course in Canada, and only about 50 years ago that the practice became general.

The story of universities in these 50 years has been one of service broadening in many ways. There has been the addition, one after another, of new branches of study; Table 9 reveals several innovations in the years since 1920. To match the nineteenth century's extension of service to women, the twentieth century has brought about the recognition by universities of an educational responsibility to the general population beyond their walls. The work of university extension departments, however, takes so many forms that it does not lend itself to tabular expression, and cannot be summarized here.

9.—Graduates from Canadian Universities and Colleges, 1920-36.

GRADUATES IN ARTS, PURE SCIENCE, AND COMMERCE.

Year.	Bachelors of Arts. ¹		Bachelors of Science (in Arts).		Bachelors of Commerce. ²		Totals.	
	Total.	Women.	Total.	Women.	Total.	Women.	Both Sexes.	Women.
1920.....	1,033	382	38	4	8	Nil	1,079	386
1921.....	1,337	514	77	7	12	1	1,426	522
1922.....	1,443	540	95	9	46	2	1,584	551
1923.....	1,551	600	115	18	68	3	1,734	621
1924.....	1,675	645	107	13	75	8	1,857	666
1925.....	1,698	674	98	14	100	1	1,896	689
1926.....	1,985	770	136	29	73	14	2,194	813
1927.....	2,080	776	149	13	114	13	2,343	802
1928.....	2,231	856	161	11	109	8	2,501	875
1929.....	2,257	922	195	27	117	15	2,569	964
1930.....	2,499	989	237	38	134	17	2,870	1,044
1931.....	2,474	981	252	45	169	17	2,895	1,043
1932.....	2,629	1,020	277	41	199	15	3,105	1,076
1933.....	2,881	1,143	259	35	244	32	3,384	1,210
1934.....	3,081	1,157	293	45	241	33	3,615	1,235
1935.....	3,034	1,162	288	39	200	26	3,522	1,227
1936.....	3,175	1,168	320	45	202	25	3,697	1,238

GRADUATES IN APPLIED SCIENCE.

Year.	Bachelors of Applied Science or Engineering		Bachelors of Architecture. ³		Bachelors of Forestry.		Totals.	
	Total.	Women.	Total.	Women.	Total.	Women.	Both Sexes.	Women.
1920.....	237	1	10	Nil	17	Nil	264	1
1921.....	322	1	17	Nil	15	Nil	354	1
1922.....	375	1	12	Nil	19	Nil	406	1
1923.....	629	1	19	Nil	19	Nil	667	1
1924.....	452	Nil	17	Nil	26	Nil	495	Nil
1925.....	348	Nil	19	Nil	21	Nil	388	Nil
1926.....	315	Nil	14	Nil	19	Nil	348	Nil
1927.....	330	1	15	1	15	Nil	360	2
1928.....	318	1	19	Nil	27	Nil	364	1
1929.....	336	Nil	25	Nil	18	Nil	379	Nil
1930.....	384	1	25	Nil	44	Nil	453	1
1931.....	418	Nil	24	Nil	41	Nil	483	Nil
1932.....	439	1	22	1	32	Nil	493	2
1933.....	554	1	32	Nil	27	Nil	613	1
1934.....	624	2	31	Nil	32	Nil	687	2
1935.....	642	1	21	2	37	Nil	700	3
1936.....	564	2	53	Nil	21	Nil	638	2

¹ Includes Bachelors of Letters and of Social Science.
of Secretarial Science.
real and Quebec.

² Includes Bachelors of Accountancy and
³ Includes diplomas in Architecture from the Schools of Fine Arts of Mont-

9.—Graduates from Canadian Universities and Colleges, 1920-36—continued.

GRADUATES IN AGRICULTURE, VETERINARY SCIENCE, AND HOUSEHOLD SCIENCE.

Year.	Bachelors of Agricultural Science.		Graduates in Veterinary Science.		Bachelors of Household Science.	Totals.	
	Total.	Women.	Total.	Women.	Women.	Both Sexes.	Women.
1920.....	113	1	6	Nil	6	125	7
1921.....	156	3	26	Nil	10	192	13
1922.....	193	1	28	Nil	9	230	10
1923.....	186	3	39	Nil	18	243	21
1924.....	157	Nil	34	Nil	30	221	30
1925.....	131	Nil	21	Nil	28	180	28
1926.....	111	3	18	Nil	19	148	22
1927.....	87	3	18	Nil	33	138	36
1928.....	104	1	21	1	57	182	59
1929.....	94	1	23		75	192	76
1930.....	131	1	21	Nil	122	274	123
1931.....	160	2	28	Nil	112	300	114
1932.....	150	1	34	Nil	146	330	147
1933.....	198	2	37	Nil	137	372	139
1934.....	215	2	36	Nil	164	415	166
1935.....	243	10	52	Nil	128	423	138
1936.....	238	7	53	Nil	138	429	145

TEACHERS DIPLOMAS AND GRADUATES IN EDUCATION AND SOCIAL SERVICE.

Year.	Teachers Diplomas.	Degrees in Education or Pedagogy.		Librarians' Degrees or Diplomas.		Physical Training Diplomas.		Social Service Diplomas.		Totals.	
	Total.	Total.	Women.	Total.	Women.	Total.	Women.	Total.	Women.	Both Sexes.	Women. ¹
1920....	153	5	Nil	Nil	—	Nil	—	Nil	—	158	Nil
1921....	100	1	Nil	Nil	—	Nil	—	5	5	106	5
1922....	176	5	Nil	Nil	—	7	7	11	11	199	18
1923....	239	18	Nil	Nil	—	17	17	13	13	287	30
1924....	346	24	1	Nil	—	24	24	9	9	403	34
1925....	344	28	3	Nil	—	18	18	20	18	410	39
1926....	373	25	1	Nil	—	37	37	24	23	459	61
1927....	450	42	10	Nil	—	38	38	27	27	557	75
1928....	438	25	2	20	19	41	41	24	23	548	85
1929....	501	31	3	42	41	45	45	21	21	640	110
1930....	523	77	31	36	36	41	41	20	20	697	128
1931....	581	60	19	39	37	45	45	18	18	743	119
1932....	744	72	21	48	46	41	41	55	51	960	159
1933....	807	56	18	53	51	25	25	48	42	989	136
1934....	810	74	14	61	58	24	24	36	36	1,005	132
1935....	649	61	18	54	53	26	25	48	44	838	140
1936....	584	100	25	66	63	21	20	45	39	816	147

¹ Excluding teachers diplomas.

9.—Graduates from Canadian Universities and Colleges, 1920-36—continued.

GRADUATES IN MEDICINE AND RELATED STUDIES.

Year.	Medical Doctors.		Dentists.		Pharmacists.		Post-Graduate Nurses Diplomas. ¹	Diplomas in Physiotherapy and Occupational Therapy.	Totals.	
	Total.	Women.	Total.	Women.	Total.	Women.	Women.	Women.	Both Sexes.	Women.
1920.....	274	9	170	2	182	9	19	Nil	645	39
1921.....	404	14	189	5	176	10	67	Nil	836	96
1922.....	448	22	221	4	181	22	98	Nil	948	146
1923.....	503	18	383	6	203	22	88	Nil	1,177	134
1924.....	651	25	281	4	200	8	80	Nil	1,212	117
1925.....	477	25	203	Nil	177	16	72	Nil	929	113
1926.....	510	17	150	4	134	4	83	Nil	877	108
1927.....	421	20	145	2	212	10	93	Nil	871	125
1928.....	481	21	98	Nil	182	9	102	13	876	145
1929.....	747	41	102	Nil	183	11	111	11	1,154	174
1930.....	518	31	114	1	204	11	111	27	974	181
1931.....	535	26	90	Nil	208	10	122	20	975	178
1932.....	511	24	78	Nil	203	12	159	24	975	219
1933.....	483	25	70	1	162	10	174	25	914	235
1934.....	488	18	83	2	160	9	125	1	857	155
1935.....	472	20	80	1	150	13	150	6	858	190
1936.....	497	21	106	Nil	190	10	191	27	1,011	249

GRADUATES IN LAW AND THEOLOGY.

Year.	From Law Schools.		From Roman Catholic Theological Colleges.	From Protestant Theological Colleges.	
	Total.	Women.	Total.	Total.	Women.
1920.....	382	12	182	212	17
1921.....	393	14	226	200	18
1922.....	282	4	245	148	22
1923.....	261	4	264	163	18
1924.....	252	11	278	152	19
1925.....	226	7	250	168	19
1926.....	277	10	270	205	23
1927.....	257	7	272	173	21
1928.....	198	7	271	166	17
1929.....	241	3	244	164	15
1930.....	211	8	269	161	16
1931.....	223	5	245	189	18
1932.....	235	8	265	173	15
1933.....	213	7	258	162	17
1934.....	209	8	288	202	20
1935.....	238	11	289	202	15
1936.....	209	7	310	174	16

¹ Includes 12 to 24 dental nurses annually.

9.—Graduates from Canadian Universities and Colleges, 1920-36—continued.

POST-GRADUATE AND HONORARY DEGREES.

Year.	Honorary Doctorates.		Doctorates in Course.		Masters of Arts. ¹		Masters of Science. ²	
	Total.	Women.	Total.	Women.	Total.	Women.	Total.	Women.
1920.....	66	1	24	Nil	147	44	27	1
1921.....	58	Nil	24	1	147	42	30	6
1922.....	145	Nil	24	1	156	46	60	4
1923.....	84	1	31	2	196	62	58	2
1924.....	78	1	35	3	222	64	73	5
1925.....	72	2	33	3	187	64	79	5
1926.....	67	Nil	28	4	202	62	82	4
1927.....	79	2	40	1	225	72	67	3
1928.....	119	3	41	4	251	74	77	5
1929.....	108	1	51	5	228	76	59	2
1930.....	127	1	61	7	238	78	68	4
1931.....	95	Nil	46	7	274	94	93	4
1932.....	78	2	80	11	239	80	124	5
1933.....	102	Nil	87	9	287	101	145	7
1934.....	96	Nil	89	11	254	87	134	4
1935.....	76	3	77	4	254	93	115	7
1936.....	100	2	68	5	252	73	133	3

Year.	Bachelors of Divinity.	Licentiates (except in Theology).		Other Post Graduate Degrees and Diplomas. ³		Totals.	
	Total.	Total.	Women.	Total.	Women.	Both Sexes.	Women.
1920.....	37	39	Nil	2	Nil	342	46
1921.....	34	41	Nil	8	Nil	342	49
1922.....	61	43	Nil	57	Nil	546	51
1923.....	42	61	1	66	1	538	69
1924.....	47	46	1	80	8	581	82
1925.....	33	57	Nil	44	3	505	77
1926.....	30	40	1	60	2	509	73
1927.....	33	70	3	61	1	575	82
1928.....	24	72	1	93	2	677	89
1929.....	31	76	1	104	2	657	87
1930.....	41	94	1	107	Nil	736	91
1931.....	37	91	2	100	2	736	109
1932.....	33	130	2	107	2	791	102
1933.....	32	97	4	97	Nil	847	121
1934.....	46	129	16	108	5	856	123
1935.....	36	112	7	95	3	765	117
1936.....	43	100	7	90	Nil	786	90

¹ Includes M. Com. and M. Ed. or M. Paed. ² Includes M.A.Sc., M.S.A., M.Sc.F., M.Arch., M.V.Sc., M.Sc. Dent., M. Surgery (where conferred separately). ³ Excepting diplomas for teachers and theology.

9.—Graduates from Canadian Universities and Colleges, 1920-36—concluded.

ESTIMATE OF STUDENTS RECEIVING FIRST DEGREES.

Year.	Grand Totals. ¹			Deductions for Duplication.			Net Totals.		
	Men and Women.	Men.	Women.	Men and Women.	Men.	Women.	Men and Women.	Men.	Women.
1920....	2,889	2,427	462	533	522	11	2,356	1,905	451
1921....	3,627	2,963	664	457	445	12	3,170	2,518	652
1922....	3,843	3,109	734	442	430	12	3,401	2,679	722
1923....	4,509	3,710	799	509	502	7	4,000	3,208	792
1924....	4,467	3,624	843	546	535	11	3,921	3,089	832
1925....	4,037	3,181	856	474	464	10	3,563	2,717	846
1926....	4,319	3,343	976	454	443	11	3,865	2,900	965
1927....	4,414	3,421	993	460	450	10	3,954	2,971	983
1928....	4,545	3,454	1,091	446	435	11	4,099	3,019	1,080
1929....	4,932	3,711	1,221	515	501	14	4,417	3,210	1,207
1930....	5,185	3,839	1,346	467	453	14	4,718	3,386	1,332
1931....	5,290	3,952	1,338	449	437	12	4,841	3,515	1,326
1932....	5,552	4,109	1,443	459	447	12	5,093	3,662	1,431
1933....	5,891	4,307	1,584	440	428	12	5,451	3,879	1,572
1934....	6,272	4,687	1,585	479	467	12	5,793	4,220	1,573
1935....	6,226	4,648	1,578	460	449	11	5,766	4,199	1,567
1936....	6,441	4,834	1,607	455	444	11	5,986	4,390	1,596

¹ Not including diplomas in Education and Social Service, a few other diplomas, post-graduate and honorary degrees.

Section 2.—Scientific and Industrial Research in Canada.

This section has, in past years, dealt with the history of scientific and industrial research in Canada and has included subsections outlining the organization and work of the National Research Council, and of those provincial councils and private institutions which are primarily interested in research work. During the past year, the operations of these organizations continued to be conducted along the lines described in previous issues of the Year Book, and to conserve space the reader is referred for this information to pp. 866-872 of the 1932 Year Book.

Section 3.—The Libraries of Canada.

The Dominion Bureau of Statistics collects information from libraries biennially. In the 1937 Year Book, at pp. 978-980, a summary of the data obtained in the latest survey was published. More recent information is not available at the date on which the 1938 Year Book goes to press.

Section 4.—Art in Canada.

An article entitled "The Development of the Fine Arts in Canada", contributed by Newton MacTavish, M.A., D.Litt., appeared at pp. 995-1009 of the 1931 Year Book and a shorter article, dealing more particularly with the National Art Gallery, at pp. 886-888 of the 1924 Year Book.

CHAPTER XXVI.—PUBLIC HEALTH AND RELATED INSTITUTIONS.

The subject matter of this chapter is treated under the following sectional headings: Section 1.—Administration of Public Health Activities in Canada by the Dominion and Provincial Governments; Section 2.—Institutional Statistics of Public Health and Benevolence where, besides health and hospitalization records, social statistics also receive some attention—the latter are becoming more and more necessary to the proper drafting of social legislation and the study of social problems; Sections 3 and 4 review concisely the work of the Victorian Order of Nurses and the Canadian Red Cross Society, respectively.

The rapid increase in the numbers committed to various institutions, such as hospitals for the insane, feeble-minded and epileptic; the alleged increase in juvenile crime and the extension of social work in this field; the increasing number of institutions caring for the aged and incurable, as well as for dependent, neglected, and handicapped children, have been marked features of the first part of the twentieth century.

Section 1.—Administration.

In Canada public health is administered by the Dominion and Provincial Governments through their respective health departments.

The Dominion Government deals only with such public health matters as are exclusively national, or such interprovincial public health matters as cannot be controlled effectively by the provinces. In addition, the Dominion Government makes grants to voluntary organizations which are engaged in public health work, notably: Canadian Welfare Council; Canadian National Institute for the Blind; Canadian Tuberculosis Association; Canadian National Committee for Mental Hygiene; Victorian Order of Nurses; Canadian Branch of St. John Ambulance Association; Canadian Red Cross Society; Canadian Social Hygiene Council; Canadian Mental Hygiene Council.

With the object of obtaining uniform legislation and procedure in the various provinces the Dominion Council of Health was created. This body consists of the Deputy Minister of the Dominion Department of Pensions and National Health as Chairman, the chief executive officer of the provincial department or board of health of each province, together with such other persons, not exceeding five, as may be appointed by the Governor in Council to hold office for three years. Of these appointed members, four represent agriculture, labour, rural women's work and social service, and child welfare, while the fifth member is a scientific adviser on public health matters. The Council meets twice a year at Ottawa, when public health problems are discussed and uniform standards and legislation adopted.

Speaking generally, the administration of local public health activities and the establishment and maintenance of institutions is in the hands of the Provincial Governments, under Sec. 92 of the British North America Act, 1867. Under their control, municipalities, societies, and individuals generally initiate charitable and humane efforts, depending on the Government to some extent for financial aid and for competent uniform inspection of methods and standards. Important, and reflecting most clearly the benefits accruing from such work, are the provisions for medical inspection of school children. These are carried out in some cases by the district or sub-district medical health officers, and in others by public health nurses

whose activities are confined to this work alone. In addition, expert advice and assistance are supplied freely to children, teachers, and parents. In many cases dental inspection is provided for. This work is relatively new and has been carried on upon a considerable scale for only a short period but great benefits have already resulted, notably general improvement in health and sanitary conditions and in the control and prevention of epidemics.

Public hospitals are the most numerous among health institutions. They are usually erected and supported by the municipalities, their actual administration being in the hands of boards of trustees; their revenue, in addition to that provided by the municipality, is derived from grants from the Provincial Governments, donations of individuals and societies, and fees paid by patients. Admission and treatment are free to all deserving persons who apply for them and whose resources are so limited as to prevent their otherwise receiving proper medical attention, while it is generally expected of others that payments for services shall be made in proportion to costs and their ability to defray them. Such public hospitals include isolation and maternity hospitals, tuberculosis sanatoria, etc. The two lazarettos for lepers are under Dominion administration, as are also hospitals for veterans and certain marine and immigrant hospitals.

Private hospitals do not receive public grants. There are also hospitals, more common in the province of Quebec, which are conducted by various religious orders; Red Cross hospitals and outposts; and special hospitals which may be privately administered or maintained by the provinces.

Mental institutions, homes for the feeble-minded and the epileptic are in most cases under provincial administration, although in Nova Scotia the insane of each county are cared for in county institutions.

Among charitable and benevolent institutions, orphanages, refuges, and homes for the aged are usually supported by the larger centres and by county municipalities. Homes or schools for the deaf and dumb and the blind are largely under provincial administration.

In the case of penal and reformatory institutions, penitentiaries are administered by the Dominion Government, while reformatories, industrial schools, prison farms, and similar corrective institutions are administered by the Provincial Governments.

Subsection 1.—Public Health Activities of the Dominion Government.

The Act of Parliament (18-19 Geo. V, c. 39, An Act respecting the Department of Pensions and National Health) creating the Dominion Department of Pensions and National Health, clearly defined its functions. The Department is divided into two divisions—those of Pensions, and National Health. The chief functions of the National Health Section (which from 1919 to 1929 was the Department of Health) are: to protect the country against the entrance of infectious disease; to exclude immigrants who might become a charge upon the country; to treat sick and injured mariners; to see that men employed on public construction work are provided with proper medical care; to set the standards and control the quality of food and drugs, except export meat and canned goods, which are under the Department of Agriculture; to control proprietary medicines and the importation and exportation of habit-forming drugs such as morphine, cocaine, etc.; to care for lepers and to co-operate with the provinces with a view to preserving and improving the public health. Following are the various Divisions of the Department of Health.

Division of Quarantine, Leprosy, Immigration Medical, Sick Mariners and Marine Hospitals.—*Quarantine*—Quarantine has for its object the prevention of the entry into the country by water, land, or air traffic of quarantinable diseases, especially plague, cholera, yellow fever, smallpox, and typhus. Quarantine stations are maintained at Halifax, N.S., Saint John, N.B., Quebec, Que., and William Head, B.C. Supervision is exercised especially over all vessels coming from abroad and any passengers or crews who are found to be suffering from quarantinable disease, together with contacts, are removed to the quarantine station, and the necessary measures taken regarding the infestation of vessels with rats or other vermin; all this in accordance with the principles laid down in the Convention of Paris, 1926. *Leprosy*—The Leprosy Branch of this Division operates two hospitals for the treatment of all cases of leprosy found in Canada, one at Tracadie, N.B., and the other at Bentinck Island, B.C. *Immigration Medical*—Medical advice is given the Immigration Department with regard to the mental and physical suitability of prospective immigrants. With this end in view there has been placed in Great Britain, Ireland, and on the Continent of Europe, a staff of Canadian doctors, whose duty is to examine all intending emigrants to Canada prior to their embarkation. This arrangement obviates the expense, discomfort, disappointment, and hardship occurring hitherto whenever it became necessary to deport, on account of physical or mental disability, immigrants who have made the journey across the ocean to Canada. Medical officers are also stationed at the principal ports of entry in Canada, who make a final inspection of prospective immigrants and supply medical care for those who are ill on arrival. *Sick Mariners and Marine Hospitals*—The sick mariners and marine hospitals provide medical and surgical attendance and such other treatment as may be required to all sick and injured mariners arriving at Canadian ports and belonging to vessels that pay sick mariners' dues, in conformity with Part V of the Canada Shipping Act (see pp. 680-682).

Division of Sanitary Engineering.—The activities normally handled under Public Health Engineering include: the administration of the Public Works Health Act, which is concerned with the health of men on construction works, canals, railways, and other forms of public works; by agreement with the U.S. Public Health Service, investigations and reports on sources of water supplies for use aboard common carriers in international and interprovincial traffic between Canada and the United States; special investigations and reports regarding pollution of the International Boundary waters in conjunction with representatives of the U.S. Public Health Service; supervision of water supplies of common carriers on the inland waters of Canada and in international and interprovincial traffic is another function; co-operation with other Dominion Departments *re* sanitation in National Parks and summer camps on Dominion lands and allied matters; with the American Railway Association regarding regulations on sanitation; with the Provincial Health Departments and the U.S. Public Health Service for the certification of water supplies of common carriers in interprovincial and international traffic.

Proprietary or Patent Medicine Division.—This Division is organized to give the public a reasonably safe and truthfully labelled proprietary medicine supply. Registration of all secret formula non-pharmacopœial medicines for human use is required, and control is exercised over the potent drugs used in the manufacture of such medicines and the representations made regarding their use.

Laboratory of Hygiene.—The Laboratory of Hygiene is chiefly concerned with the control of biologic products used in treatment of human diseases, particu-

larly with reference to the potency of certain toxins, antitoxins, and other serological preparations. Sera and vaccines are scrutinized for purity, sterility, and potency. Such drugs as digitalis, strophanthus, ergot, pituitrin, and the salvarsans are examined for potency, and standards for them, based upon those of the League of Nations' Health Committee, are prepared by the Laboratory and furnished to all manufacturers desiring to use them in making their products. Disinfectants are investigated as to manufacturers' claims for germicidal qualities. Special and general aid is rendered to other departments of government, and research problems are undertaken.

Food and Drugs Division.—In this Division, inspection and laboratory services are maintained primarily for the purposes of the Food and Drugs Act, which is regulatory in character, designed to prevent the importation and sale of adulterated or misbranded food and drugs. Laboratories in Halifax, Montreal, Ottawa, Toronto, Winnipeg, and Vancouver examine samples taken from suspected stocks. Corrective measures are applied whenever adulteration or misbranding is found. Standards of quality have been established for many products, and the supervision of informative, truthful label declarations is a special objective. Laboratory services are provided for other Divisions of the Department, and co-operation with other departments of government is effectively carried on.

Narcotic Drug Division.—Since the introduction of opium smoking in Canada forty or more years ago the use of habit-forming drugs, such as morphine, heroin, and cocaine, has increased. One of the first steps taken by the Department of Health was the creation of a Narcotic Branch. Through this Branch, the importation and sale of such drugs are controlled in accordance with the principles laid down by international Conventions agreed to at The Hague and Geneva. Wholesale agents and druggists are obliged to keep records of importation or sale and to forward their records periodically to the Department. The legitimate use of these habit-forming drugs is thus controlled.

Epidemiology.—The Epidemiological Division co-operates with the provincial Departments of Health in the control of the communicable diseases and carries out special studies in regard to morbidity and mortality of disease and public health problems that arise from time to time.

Industrial Hygiene.—The purpose of the Industrial Hygiene Division is to develop methods for the protection and improvement of the health of industrial workers. This Division conducts special studies regarding illness in industries in co-operation with the provincial Departments of Health.

Child and Maternal Hygiene.—The work of this Division consists of measures designed for the reduction of infantile and maternal mortality in Canada. This necessitates collection of information regarding causative factors and the dissemination of knowledge regarding the application of remedial measures.

Medical Appraisal and Advisory Division.—This Division is concerned with medical examination of civil servants, supervision of sick leave and superannuation of civil servants throughout Canada on behalf of the Civil Service Commission, and special medical studies.

Publicity.—As the name indicates, the efforts of this Division are directed towards the dissemination of information on all phases of public health. The work consists of the compilation and distribution of public health literature, of exhibits, lectures, etc.

Subsection 2.—Public Health Activities of the Provincial Governments.*

Prince Edward Island.—The supervision of public health matters in Prince Edward Island was placed, on July 1, 1931, under a specially created Department of Public Health, presided over by a Minister and his Deputy. Two part-time physicians, five full-time public health nurses and two sanitary and food inspectors are employed. Under the direction of the Deputy Minister, the province is divided into five public health districts and each nurse is assigned a territory in which she is responsible for the inspection of school children, home visits, home-nursing classes, immunizing and vaccinating clinics, etc. The sanitary and food inspectors make regular surveys of the food-manufacturing plants, school premises, hotels, boarding houses, restaurants, etc., throughout the province. The Government also operates the Falconwood Hospital for the Insane and the Provincial Infirmary.

In addition the Government subsidizes the Provincial Sanatorium, which has a capacity of sixty beds and has been functioning to capacity since July 1, 1931. In charge of the Provincial Sanatorium is a Medical Superintendent with an assistant and a staff of trained nurses. The Superintendent conducts chest clinics at regular intervals throughout the province as well as a regular weekly clinic in the Sanatorium, where referred cases from physicians are examined.

The Department of Health operates the Provincial Laboratory and a qualified technician is in charge, who examines material forwarded by physicians throughout the province.

Two venereal disease clinics are conducted by the Public Health Department, one in Charlottetown and the other in Summerside. All prisoners in Queens and Prince Counties gaols are examined and treatment given when required. Other patients unable to attend these clinics on account of distance are treated by their own local physicians who are supplied with the necessary medication.

Nova Scotia.—In Nova Scotia the Department of the Public Health directs its energies to communicable disease control; prenatal, post-natal, and school hygiene; sewage disposal; safety of milk and water supplies; collection of vital statistics; mental hygiene and health education. All of this has brought into being a comprehensive organization, presided over by a Minister, which acts in an advisory capacity to all local boards of health; makes regulations respecting any matter relevant to the public health; maintains a field force which provides a consulting service in tuberculosis and other health activities; supports a public health nursing service with specially trained nurses, who work both in the schools and in the homes; gives a free public health laboratory service which extends throughout the province; supervises the provincial hospitals, both general and special; provides inspection of public general hospitals and humane institutions; stocks and dispenses sera and vaccines; and distributes literature on all phases of health.

In addition to the foregoing the Department has recently broadened out and has taken under its ægis certain phases of social welfare and dependency, which give it the administration of mothers' allowances, old age pensions, child welfare, and a training school for the mentally deficient.

The latest venture has been the planning of a public health unit for Cape Breton island, which unit is now in process of organization.

New Brunswick.—The Department of Health, under the administration of a Minister of Health, was established in 1918. It provides the following services:

* The material under this heading has been revised by the respective provincial authorities.

general sanitation, including supervision of water supplies and sewage disposal; control of communicable diseases, including tuberculosis and venereal diseases; public health laboratory and the supply of biologicals; medical inspection of schools; collection of vital statistics; public health nursing and child welfare; health education; and general supervision and co-ordination of the work of the sub-district boards of health.

Under the Minister, the Department is directed by the Chief Medical Officer who is also Registrar General of Vital Statistics. The staff consists of a director of laboratories, eleven full-time medical health officers, a director of public health nursing service and in addition a part-time director of venereal disease clinics.

There are ten health districts, each in charge of a district medical health officer who also provides the tuberculosis diagnostic and medical inspection of schools services.

Sixteen sub-health districts, each with its own board of health of which the district medical health officer is the chairman, have been organized. The sub-district boards of health have their own individual staffs of sanitary, food, plumbing, and other inspectors, registrars of vital statistics and public health nurses, all operating under the Provincial Health Act and Regulations.

The Department also maintains twenty-four depots for the distribution of biologicals and eleven venereal disease clinics.

The twentieth annual report of the Chief Medical Officer contains a review of the various services, the vital statistics for the province and the reports of staff members and of the sub-district boards of health.

Quebec.—The Department of Health, under the control of the Minister of Health, replaced the former Provincial Bureau of Health at the end of the year 1936.

The province of Quebec inaugurated, in 1926, a new system known as the 'county health units', consisting of a full-time health service for each county, or group of two or three adjoining counties. At present, 36 health units covering 46 counties have been organized with new counties asking for the same privilege. The former district health officers, reduced to 12, are in charge of all the counties not yet organized as county health units.

The services of all these officers and their staffs of nurses, sanitary inspectors, etc., are given in the form of consultations, public lectures, school medical inspections, baby and travelling tuberculosis clinics, and investigations of all kinds, immunization, sanitation, etc.

In addition to an Administrative Division, the Ministry of Health maintains the following Divisions: Laboratories, Sanitary Engineering, Demography, Mental Hygiene, Public Charities, Health Units and Districts, and Epidemiology. The control of venereal disease and tuberculosis is also undertaken and the Grancher system of foster homes has been introduced. The two Divisions created last year, namely, the Division of Industrial Hygiene and the Division of Hygiene of Nutrition, are now in operation. The latter includes maternal and child welfare.

The energies of the Ministry of Health are also directed towards the prevention of epidemics, more particularly tuberculosis and the more important causes of infant mortality. To this end, the Ministry has established 21 anti-tuberculosis dispensaries and 70 baby clinics, including those receiving government grants. During the year 1936-37, in the anti-tuberculosis dispensaries and the travelling

tuberculosis clinics, 23,407 people were examined. The various county health units have provided for the immunization of 22,940 children against diphtheria, which, with those previously immunized, make a total of 242,506.

Ontario.—The Department of Health of Ontario is under a Minister of the Government. In the direction of the departmental program, he is assisted by a Deputy Minister. These activities are appropriately divided into the following Divisions: Hospitals; Sanitary Engineering; Laboratories; Preventable Diseases; Maternal and Child Hygiene, and Public Health Nursing; Oral Hygiene; Tuberculosis Prevention; Industrial Hygiene, and Inspection of Training Schools for Nurses.

The local health work is carried on by a Board of Health and a Medical Officer of Health in each of the 900 municipalities. Twelve cities have whole-time health officers.

The Department assumes the responsibility for the free distribution of biological products used in the prevention and cure of preventable diseases. Insulin is distributed to those in need of such treatment on the recommendation of the local authorities; a percentage of the cost is contributed by the local municipalities. The maximum in the way of bacteriological service, including the examination of pathological tissue, is offered through the central laboratory and the seven branch laboratories, which are situated at appropriate centres throughout the province. Consultative service in the field of mental hygiene is made available through clinics which operate throughout the province. A regular schedule is maintained by these clinics and the profession is urged to take advantage of the service offered.

The increased public interest in the prevention of tuberculosis has justified the large measure of emphasis placed, during the past two years, on this phase of the program. The Department has continued its efforts to make both diagnosis and treatment of cancer possible for all. Seven cancer clinics are operating in well-chosen centres in the province; each of these is substantially subsidized by the Department.

The control of venereal diseases is stimulated by the conduct in the large urban centres of clinics operated for the treatment of these diseases. In all municipalities, the Department assumes a percentage of the cost of treatment of those suffering from either syphilis or gonorrhœa, who are not in a position to pay for the necessary treatment.

Manitoba.—Manitoba has an organized Department of Health and Public Welfare. The Health and Public Welfare Act states that the Minister shall preside over and have the management and direction of the Department, and the Department shall have administrative jurisdiction over all matters in the province which relate to health and public welfare. The various Divisions of the Department include those of: Disease Prevention (food and dairy inspection, public health nursing, sanitation, venereal disease prevention, communicable diseases, industrial hygiene, and maternal and child hygiene); Provincial Laboratories; Vital Statistics; Hospitalization; Psychiatry (Selkirk and Brandon Hospitals for Mental Diseases—Manitoba School for Mentally Defective Persons, Portage la Prairie—Psychopathic Hospital, Winnipeg); Child Welfare; Estates of Insane Persons and Indigency in Unorganized Territory; Supervision of Aged and Infirm Persons (being supported by public funds); Supervision of Medical Service (supplied by the province).

The previously established Board of Health and the Welfare Supervision Board have assumed an advisory capacity to the Minister of Health and Public Welfare;

and the Child Welfare Board is both advisory and administrative, being responsible for the administration of the Child Welfare Act.

Saskatchewan.—The Department of Public Health has been organized since 1923 under a Minister and a Deputy Minister. The Public Health Act of Saskatchewan also provides for a Public Health Council, consisting of the Deputy Minister as Chairman, three medical practitioners, a veterinary surgeon and a civil engineer. This Council acts in an advisory capacity to consider new health regulations and allied problems.

The Department is organized into seven Divisions. The Division of Administration, directly under the Deputy Minister who is also the Registrar General, coordinates the activities of the Department as a whole, directs the general policy in public health matters, supervises finances, legislation, hospital grants, municipal boards of health, and medical relief in certain unorganized territories. The Division of Public Health Nursing supervises maternity grants, organizes inspection of school children and home visits, pre-school and preventive clinics in co-operation with local physicians and conducts a public health nursing service throughout the province. The Division of Communicable Disease deals with epidemiology in all its phases and administers the regulations governing cemeteries and care and transportation of the dead. Supervision of trachoma, venereal disease, and tuberculosis (other than the organization of the Anti-Tuberculosis League) also comes under this Division. The Division of Sanitation supervises food, water, milk, and ice supplies, sewerage systems, urban and rural sanitation, and the organization of union hospital districts. The Division of Laboratories includes in its organization bacteriology, serology, pathology, chemical analyses, and medico-legal work. The Office of the Registrar General (formerly the Division of Vital Statistics) administers the Vital Statistics Act and the Marriage Act. The system used in classifying vital statistics has been decided upon in co-operation with other provinces and the Dominion Bureau of Statistics. The Mental Hygiene Act and the mental institutions established under its provisions in North Battleford, Weyburn, and Regina (psychopathic ward), are administered by the Department, and the internal operations of these institutions are supervised by the Commissioner of Mental Services.

Union Hospitals.—In Saskatchewan, in addition to the general hospitals, there exists a system known as the Union Hospital Organization, designed to furnish hospital accommodation in rural districts. Under the provisions of this plan, two or more municipalities may co-operate in building, equipping, and maintaining a hospital. Municipalities constituting a hospital district may enter into an agreement with the hospital board to provide free treatment for certain classes of patients at the cost of the municipalities concerned.

Cancer Commission.—This Commission, created in 1930, consists of the Deputy Minister of Public Health as Chairman, together with two physicians as members and a physician as secretary. Consultative diagnostic and treatment clinics have been established in Regina and Saskatoon, and radon is manufactured at an emanation plant in Saskatoon. Close contact is maintained with current advances in the prevention, diagnosis, and treatment of cancer.

Health Services Board.—This Board consists of the Deputy Minister as Chairman, a representative of the provincial College of Physicians and Surgeons and a representative of the Association of Rural Municipalities. The Board is inquiring into the extent and administration of the various health services existing in the province, collecting and studying data on the general situation regarding incidence

of illness from all causes, considering methods for an equitable distribution of the costs of illness, studying the needs of the people with respect to general health services and the necessity of co-ordination of those now existing. An advisory committee is associated with the Board, and consists of representatives from medical, hospital and allied organizations.

Alberta.—The Department of Public Health was established by an Act of the Provincial Legislature in 1919. The Department includes the following Divisions: Communicable Diseases; Sanitary Engineering and Sanitation; Public Health Education; Laboratory; Public Health Nursing; Hospitals, Municipal Hospitals; Hospital Inspection; Social Hygiene; Vital Statistics; Mental Hygiene; Dental Hygiene; Tuberculosis Control and the following institutions: the Central Alberta Sanatorium; the Provincial Mental Hospital, Ponoka; the Provincial Training School, Red Deer; the Provincial Auxiliary Hospital, Claresholm; and the Provincial Mental Institute, Edmonton.

Free clinics for venereal diseases are maintained in the principal cities and in the two provincial gaols. Educational work on social hygiene is carried on by means of lectures, moving pictures, bulletins, and radio talks.

British Columbia.—The Provincial Board of Health, responsible to the Provincial Secretary, administers the laws relating to public health in British Columbia. Its Branches comprise the following: Sanitation, Venereal Clinics, Laboratories, Tuberculosis, Infectious Diseases and Public Health Nursing, and Vital Statistics. The Sanitation Branch has directed numerous recent efforts to the prevention of the spread of communicable diseases by touring motorists, and to the control of campers and squatters along the coast. The Laboratories Branch, in addition to the analysis of specimens, distributes various vaccines and antitoxin. The Tuberculosis Branch has been very much enlarged, the province being organized into districts under the direction of a medical officer and specially trained public health nurses. The educational part of the work is accentuated, and home visits are emphasized in order to educate the people to the dangers of infection.

Section 2.—Institutional Statistics.*

Under authority granted by the Dominion Government in 1930, the Dominion Bureau of Statistics has since co-operated with the provincial authorities through its newly created branch of the Census of Institutions, and collects, on a Dominion-wide basis, statistics for the following types of institutions: (1) *hospitals*—institutions primarily engaged in the prevention and cure of physical sickness and disease, such as hospitals for the sick, sanatoria, and institutions for incurables; (2) *mental and neurological institutions*—for the treatment and care of mental ailments, such as asylums for the insane, institutions for the feeble-minded, epileptic, etc.; (3) *charitable and benevolent institutions*—caring for the poor of both sexes and of all ages, such as homes for the aged, county refuges, orphanages, etc.; and (4) *penal and corrective institutions*—having for their purpose the reclamation of the criminal and the reformation and training of delinquent boys and girls. Institutional statistics, as summarized in Table 1, may, therefore, be regarded as dealing with the four main types of social pathology, *viz.*, physical, mental, economic, and moral. They provide a body of statistical data which affords to students of social problems a fairly comprehensive view of institutional life in Canada.

Historical.—A brief historical sketch of the origin and growth of the several classes of institutions in Canada was given at pp. 1006-1009 of the 1936 Year Book.

* This section has been revised by J. C. Brady, Officer in Charge of Census of Institutions, Dominion Bureau of Statistics.

1.—Numbers of Institutions in Canada, by Provinces, 1936.

NOTE.—Dashes in this table mean that no institutions of the type indicated existed in those provinces so far as was known.

Type of Institution.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon and N.W.T.	Total.
Hospitals (excluding mental)—											
Public—											
General.....	4	23	16	52	110	33	74	76	68	10	466
Women's.....	—	2	1	5	4	—	3	2	1	—	18
Paediatric.....	—	1	—	3	2	1	1	1	2	—	11
Isolation.....	—	1	—	4	7	2	1	3	—	—	18
Convalescent.....	—	—	—	3	1	1	—	—	—	—	5
Tuberculosis.....	1	2	3	8	13	4	4	1	1	—	37
Red Cross.....	—	—	—	—	27	—	6	—	1	—	34
Incurable.....	—	—	1	1	7	1	2	5	1	—	18
Other.....	—	—	—	5	1	—	—	—	—	—	6
Totals, Public.....	5	29	21	81	172	42	91	88	74	10	613
Private.....	—	4	7	33	68	7	63	50	27	—	259
Dominion.....	—	4	3	4	7	3	1	5	4	—	31
Totals, All Hospitals.....	5	37	31	118	247	52	155	143	105	10	903
Mental Institutions—											
Public hospitals.....	1	1	1	6	11	2	2	3	3	—	30
Training schools.....	—	1	—	1	1	1	—	1	—	—	5
Psychiatric hospitals.....	—	—	—	—	1	1	—	—	—	—	2
County and municipal institutions.....	—	14	—	—	—	—	—	—	—	—	14
Dominion hospitals.....	—	—	—	1	1	—	—	—	—	—	2
Private institutions.....	—	—	—	1	2	—	—	—	1	—	4
Totals, Mental.....	1	16	1	9	16	4	2	4	4	—	57
Charitable and Benevolent Institutions—											
Homes for adults.....	1	16	8	33	64	6	—	2	7	—	137
Homes for adults and children.....	1	7	10	48	15	3	1	1	2	—	88
Orphanages.....	2	10	7	39	28	14	4	6	8	—	118
Day nurseries.....	—	1	—	3	8	2	—	—	1	—	15
Children's aid societies.....	2	14	3	2	58	5	5	3	3	—	95
Juvenile immigration societies.....	—	1	1	1	2	—	—	—	1	—	6
Totals, Charitable, etc..	6	49	29	126	175	30	10	12	22	—	459
Penal and Reformative Institutions—											
Penitentiaries.....	—	—	1	1	2	1	1	—	1	—	7
Corrective and reformative institutions.....	—	4	3	4	9	3	2	2	2	—	29
Male juveniles.....	—	2	1	2	3	1	1	—	1	—	11
Female juveniles.....	—	—	—	1	1	—	—	1	1	—	4
Male adults.....	—	—	—	3	—	—	1	—	—	—	4
Female adults.....	—	—	1	—	1	—	—	—	—	—	2
Female adults and juveniles.....	—	2	1	1	1	2	—	1	—	—	8
Totals, Penal, etc.....	—	4	4	5	11	4	3	2	3	—	36
Grand Totals.....	12	106	65	259	449	90	170	161	134	10	1,455

Subsection 1.—Statistics of Hospitals, other than Mental.

The total number of various hospitals in operation in Canada during 1936 is given in the first part of Table 1. It is seen from the table that in addition to 613 public hospitals there were 259 private hospitals and 31 hospitals operated by the Dominion Government made up of: 8 for war veterans, 4 quarantine and immigration, 1 marine and 2 leper hospitals under the direction of the Department of Pensions and National Health; 9 military hospitals under the Department of National Defence; and 7 hospitals for Indians under the Department of Indian Affairs.*

* A complete list of all hospitals in Canada, giving name, location, type, bed accommodation, etc., will be found in the Hospital Directory for Canada, 1936, issued by the Dominion Bureau of Statistics.

Summary statistics of reporting hospitals, which included 99·5 p.c. of all hospitals in 1936, are presented for the years 1932 to 1936 in Table 2, and detailed statistics of staff, facilities, and movement of patients are shown by provinces in Table 3.

2.—Summary Statistics of Reporting Hospitals in Canada, calendar years 1932-36.

NOTE.—Figures include hospitals and homes for incurables, but do not include mental hospitals.

Item.	1932.	1933.	1934.	1935.	1936.
Public Hospitals—					
Numbers reporting.....	589 ¹	598 ²	602 ³	608 ²	610 ²
Bed capacities ⁴	45,835	58,100	58,535	59,832	59,909
Patients under treatment ⁵	650,845	657,372	706,240	766,559	825,720
Total collective days' stay ⁶	11,868,608	13,033,921	13,767,188	14,696,408	15,175,356
Private Hospitals—					
Numbers reporting.....	214	243	261	267	259
Bed capacities ⁴	2,315	3,312	3,490	3,409	3,386
Patients under treatment ⁵	22,460	25,273	30,180	32,363	35,707
Total collective days' stay ⁶	351,489	368,221	412,461	410,890	423,239
Dominion Hospitals—					
Numbers reporting.....	35	32	28 ⁷	31 ⁸	30 ⁸
Bed capacities ⁴	3,427	2,560	2,422	2,638	3,191
Patients under treatment ⁵	16,058	15,160	15,447	16,646	16,518
Total collective days' stay ⁶	733,967	424,046	421,972	445,694	691,574
Totals—					
Numbers reporting.....	838	873	891	906	899
Bed capacities ⁴	51,577	63,972	64,447	65,879	66,486
Patients under treatment ⁵	689,363	697,805	751,867	815,568	877,945
Total collective days' stay ⁶	12,954,064	14,194,409	15,014,082	15,963,882	16,290,169

¹ Eight public hospitals did not report.

² Three public hospitals in Yukon and N.W.T. did not report.

³ Seven public hospitals in Yukon and N.W.T. did not report.

⁴ 'Bed capacities' includes beds, cribs and bassinets.

⁵ 'Patients under treatment' includes newborn.

⁶ 'Collective

days' stay' includes stay of newborn.

⁷ Four Dominion hospitals did not report.

⁸ One Do-

minion hospital did not report.

3.—Statistics of Reporting Hospitals, by Provinces, Showing Staff, Facilities, and Movement of Population, calendar year 1936.

NOTE.—Figures include hospitals and homes for incurables, but do not include mental hospitals.

Province and Item.	Public Hospitals.	Province and Item.	Public Hospitals.		Private Hospitals.
	General.		General.	All Other.	
Yukon and N.W.T.					
Number of hospitals reporting.	7 ¹	Prince Edward Island.			
Approved schools of nursing....	Nil	Numbers of hospitals reporting	4	1 ²	Nil
		Approved schools of nursing...	3	Nil	Nil
Staff—					
Salaried doctors.....	2	Staff—			
Interns.....	Nil	Salaried doctors.....	1	Nil	-
Graduate nurses.....	17	Interns.....	2	Nil	-
Student nurses.....	Nil	Graduate nurses.....	19	7	-
Total, Personnel.....	56	Student nurses.....	64	Nil	-
		Totals, Personnel.....	141	24	-
Hospital Facilities—					
X-Ray.....	4	Hospital Facilities—			
Clinical laboratory.....	2	X-Ray.....	3	1	-
Physio-therapy.....	Nil	Clinical laboratory.....	3	1	-
		Physio-therapy.....	1	Nil	-
Movement of Population—					
Admissions.....	888	Movement of Population—			
Live births.....	46	Admissions.....	4,707	68	-
Total, Under Treatment...	1,044	Live births.....	428	1	-
Discharges.....	873	Totals, Under Treatment.	5,269	122	-
All deaths.....	80	Discharges.....	4,930	46	-
Total collective days' stay..	35,583	All deaths.....	174	15	-
		Total collective days' stay..	52,372	19,848	-

¹ Three general hospitals did not report, and figures for the Territories are, therefore, not as representative as for the provinces.

² This institution is classified in Table 1.

3.—Statistics of Reporting Hospitals, by Provinces, Showing Staff, Facilities, and Movement of Population, calendar year 1936—continued.

Province and Item.	All Hospitals.	Public Hospitals.		Private Hospitals.	Dominion Hospitals.
		General.	All Other.		
Nova Scotia.					
Numbers of hospitals reporting.....	37	23	6 ¹	4	4
Approved schools of nursing.....	15	11	2	2	Nil
Staff—					
Salaried doctors.....	16	5	6	Nil	5
Interns.....	26	18	8	Nil	Nil
Graduate nurses.....	298	194	51	39	14
Student nurses.....	438	330	53	55	Nil
Totals, Personnel.....	1,526	937	313	184	92
Hospital Facilities—					
X-Ray.....	28	22	3	2	1
Clinical laboratory.....	23	16	2	3	2
Physio-therapy.....	14	9	1	3	1
Movement of Population—					
Admissions.....	37,785	29,440	2,930	3,832	1,583
Live births.....	3,712	2,234	922	556	Nil
Totals, Under Treatment.....	48,262	32,726	9,258	4,529	1,749
Discharges.....	40,068	30,593	3,642	4,306	1,527
All deaths.....	1,333	1,033	190	88	22
Total collective days' stay.....	669,191	419,057	157,011	49,834	43,289
New Brunswick.					
Numbers of hospitals reporting.....	31	16	5 ¹	7	3
Approved schools of nursing.....	13	12	1	Nil	Nil
Staff—					
Salaried doctors.....	22	8	8	Nil	6
Interns.....	13	11	2	Nil	Nil
Graduate nurses.....	227	149	50	21	7
Student nurses.....	372	359	13	Nil	Nil
Totals, Personnel.....	1,177	872	224	39	42
Hospital Facilities—					
X-Ray.....	21	15	3	2	1
Clinical laboratory.....	16	11	3	Nil	2
Physio-therapy.....	16	12	3	Nil	1
Movement of Population—					
Admissions.....	22,957	20,413	581	1,382	581
Live births.....	1,958	1,815	105	38	Nil
Totals, Under Treatment.....	26,094	22,869	1,123	1,456	646
Discharges.....	23,732	21,209	589	1,387	547
All deaths.....	1,005	874	86	32	13
Total collective days' stay.....	505,268	306,410	162,536	14,799	21,523
Quebec.					
Numbers of hospitals reporting.....	118	52	29 ¹	33	4
Approved schools of nursing.....	37	28	7	2	Nil
Staff—					
Salaried doctors.....	254	122	88	21	23
Interns.....	301	246	55	Nil	Nil
Graduate nurses.....	1,867	1,389	354	93	31
Student nurses.....	1,896	1,611	259	26	Nil
Totals, Personnel.....	10,480	7,779	2,167	297	237
Hospital Facilities—					
X-Ray.....	75	44	20	8	3
Clinical laboratory.....	65	36	16	10	3
Physio-therapy.....	54	31	14	7	2
Movement of Population—					
Admissions.....	151,886	124,441	21,308	5,258	879
Live births.....	10,897	7,892	2,251	754	Nil
Totals, Under Treatment.....	173,517	138,166	27,796	6,201	1,354
Discharges.....	155,468	126,398	22,287	5,878	905
All deaths.....	7,349	5,858	1,324	138	29
Total collective days' stay.....	4,235,538	2,543,007	1,452,291	87,821	152,419

¹ These institutions are classified in detail in Table 1.

3.—Statistics of Reporting Hospitals, by Provinces, Showing Staff, Facilities, and Movement of Population, calendar year 1936—continued.

Province and Item.	All Hospitals.	Public Hospitals.		Private Hospitals.	Dominion Hospitals.
		General.	All Other.		
Ontario.					
Numbers of hospitals reporting.....	247	110	62 ¹	68	7
Approved schools of nursing.....	74	62	11	1	Nil
Staff—					
Salaried doctors.....	282	110	84	29	59
Interns.....	243	208	35	Nil	Nil
Graduate nurses.....	2,595	1,664	706	140	85
Student nurses.....	3,421	3,135	273	13	Nil
Totals, Personnel	13,720	9,582	3,163	474	501
Hospital Facilities—					
X-Ray.....	146	102	27	14	3
Clinical laboratory.....	86	58	15	11	2
Physio-therapy.....	72	54	5	12	1
Movement of Population—					
Admissions.....	244,607	202,274	27,556	10,339	4,438
Live births.....	29,647	24,526	3,128	1,890	103
Totals, Under Treatment	288,547	234,874	35,670	12,580	5,423
Discharges.....	262,043	216,554	29,147	11,951	4,391
All deaths.....	12,419	10,315	1,717	247	140
Total collective days' stay.....	5,407,324	3,127,012	1,834,947	136,474	308,891
Manitoba.					
Numbers of hospitals reporting.....	52	33	9 ¹	7	3
Approved schools of nursing.....	20	15	5	Nil	Nil
Staff—					
Salaried doctors.....	89	43	21	4	21
Interns.....	66	55	11	Nil	Nil
Graduate nurses.....	520	328	152	17	23
Student nurses.....	876	759	117	Nil	Nil
Totals, Personnel	3,095	2,083	857	39	116
Hospital Facilities—					
X-Ray.....	32	23	6	2	1
Clinical laboratory.....	23	13	5	3	2
Physio-therapy.....	15	10	2	2	1
Movement of Population—					
Admissions.....	63,012	52,320	7,880	1,110	1,702
Live births.....	6,489	6,145	19	308	17
Totals, Under Treatment	73,031	60,490	9,180	1,448	1,913
Discharges.....	67,250	56,620	7,565	1,388	1,677
All deaths.....	2,307	1,912	334	20	41
Total collective days' stay.....	1,240,915	697,847	468,051	10,995	64,022
Saskatchewan.					
Numbers of hospitals reporting.....	155	74	17 ¹	63	1
Approved schools of nursing.....	11	10	1	Nil	Nil
Staff—					
Salaried doctors.....	26	10	15	1	2
Interns.....	24	20	4	Nil	
Graduate nurses.....	650	502	95	53	
Student nurses.....	614	598	16	Nil	
Totals, Personnel	2,606	2,040	422	144	
Hospital Facilities—					
X-Ray.....	62	57	3	2	2
Clinical laboratory.....	36	32	3	1	
Physio-therapy.....	27	24	2	1	
Movement of Population—					
Admissions.....	73,034	61,555	8,195	3,284	2
Live births.....	8,065	6,766	496	803	
Totals, Under Treatment	84,031	70,168	9,694	4,169	
Discharges.....	78,419	65,914	8,491	4,014	
All deaths.....	2,540	2,262	190	88	
Total collective days' stay.....	1,272,545	847,869	384,494	40,182	

¹ These institutions are classified in detail in Table 1.² New hospital; no report for 1936.

3.—Statistics of Reporting Hospitals, by Provinces, Showing Staff, Facilities, and Movement of Population, calendar year 1936—concluded.

Province and Item.	All Hospitals.	Public Hospitals.		Private Hospitals.	Dominion Hospitals.
		General.	All Other.		
Alberta.					
Numbers of hospitals reporting.....	143	76	12 ¹	50	5
Approved schools of nursing.....	11	10	1	Nil	Nil
Staff—					
Salaried doctors.....	54	20	6	7	21
Interns.....	37	37	Nil	Nil	Nil
Graduate nurses.....	652	531	56	40	25
Student nurses.....	701	695	6	Nil	Nil
Totals, Personnel.....	2,833	2,400	220	125	88
Hospital Facilities—					
X-Ray.....	75	62	2	8	3
Clinical laboratory.....	36	30	1	3	2
Physio-therapy.....	21	16	1	3	1
Movement of Population—					
Admissions.....	77,207	71,204	1,782	1,713	2,508
Live births.....	9,773	8,658	353	645	117
Totals, Under Treatment.....	90,027	82,154	2,671	2,430	2,772
Discharges.....	84,083	77,247	1,989	2,296	2,551
All deaths.....	2,836	2,623	83	61	69
Total collective days' stay.....	1,243,129	966,317	194,850	31,813	50,149
British Columbia.					
Numbers of hospitals reporting.....	105	68	6 ¹	27	4
Approved schools of nursing.....	10	9	1	Nil	Nil
Staff—					
Salaried doctors.....	89	55	8	8	18
Interns.....	49	49	Nil	Nil	Nil
Graduate nurses.....	913	780	60	54	19
Student nurses.....	748	738	10	Nil	Nil
Totals, Personnel.....	3,821	3,252	319	140	110
Hospital Facilities—					
X-Ray.....	69	60	2	6	1
Clinical laboratory.....	33	27	2	2	2
Physio-therapy.....	24	19	2	2	1
Movement of Population—					
Admissions.....	80,943	75,057	850	2,510	2,526
Live births.....	8,322	7,682	403	237	Nil
Totals, Under Treatment.....	93,001	85,629	1,817	2,894	2,661
Discharges.....	85,333	79,083	1,119	2,673	2,458
All deaths.....	3,576	3,328	103	89	56
Total collective days' stay.....	1,608,456	1,287,582	218,272	51,321	51,281
Canada.					
Numbers of hospitals reporting.....	900	463	147 ¹	259	31
Approved schools of nursing.....	194	160	29	5	Nil
Staff—					
Salaried doctors.....	835	376	236	70	153
Interns.....	761	646	115	Nil	Nil
Graduate nurses.....	7,765	5,573	1,531	457	204
Student nurses.....	9,130	8,289	747	94	Nil
Totals, Personnel.....	39,479	29,142	7,709	1,442	1,186
Hospital Facilities—					
X-Ray.....	516	392	67	44	13
Clinical laboratory.....	324	228	48	33	15
Physio-therapy.....	244	176	30	30	8
Movement of Population—					
Admissions.....	757,094	642,299	71,150	29,428	14,217
Live births.....	79,338	66,192	7,678	5,231	237
Totals, Under Treatment.....	882,945	733,389	97,331	35,707	16,518
Discharges.....	802,245	679,421	74,875	33,893	14,056
All deaths.....	33,634	28,459	4,042	763	370
Total collective days' stay.....	16,290,169	10,283,056	4,892,300	423,239	691,574

¹ These institutions are classified in detail in Table 1.

Out-Patient Departments.—Out-patient departments, or clinics, are operated independently or in connection with hospitals, medical colleges, universities, or other institutions. The dispensary or clinic in connection with a hospital is generally the out-patient department treating patients who do not occupy beds in the hospital. Sometimes, however, the out-patient department is distinct from the hospital proper and is a separate institution with its own staff, etc. The extension of out-patient services to patients of modest means has far-reaching and beneficial effects. It may replace admission to a hospital, or may serve to secure necessary and beneficial hospitalization. As a general rule, out-patient departments are subsidized from the funds of the general hospital and separate records are not kept. Until a uniform system of accounting is adopted, it will not be possible to give the average cost per patient.

Table 4 gives the hospitals of each class operating public out-patient departments in Canada, by provinces, 1936. The statistics are rendered more complicated than is desirable because of lack of uniformity in the method of reporting patients and treatments. The majority of hospitals report both patients and treatments, but a considerable number report either patients or treatments, but not both.

4.—Public Hospitals Operating Out-Patient Departments, 1936.

NOTE.—Figures of government and municipal clinics held in hospitals are not included.

Province and Class of Hospital.	Total Out-Patient Departments.	Both Patients and Treatments Reported.			Patients only Reported.		Treatments only Reported.	
		No. Reporting.	Patients.	Treatments.	No. Reporting.	Patients.	No. Reporting.	Treatments.
Canada	73	41	202,671	751,013	13	155,520	19	868,305
General.....	53	32	173,024	645,244	6	89,508	15	833,273
Women's.....	4	1	825	1,981	2	19,188	1	24,055
Pædiatric.....	7	4	24,671	90,522	3	37,607	Nil	—
Tuberculosis.....	9	4	4,151	13,266	2	9,117	3	10,977
Other.....	Nil	—	—	—	—	—	—	—
Nova Scotia	1	Nil	—	—	1	6,504	Nil	—
General.....	1	Nil	—	—	1	6,504	Nil	—
New Brunswick	2	2	10,111	30,788	Nil	—	Nil	—
General.....	2	2	10,111	30,788	Nil	—	Nil	—
Quebec	26	15	105,121	347,923	5	118,738	6	326,642
General.....	22	14	104,881	347,160	2	69,654	6	326,642
Women's.....	1	—	—	—	1	12,129	—	—
Pædiatric.....	3	1	240	763	2	36,955	—	—
Other.....	Nil	—	—	—	—	—	—	—
Ontario	24	14	63,525	240,906	4	24,709	6	427,306
General.....	13	8	38,133	161,661	1	11,054	4	399,765
Women's.....	3	1	825	1,981	1	7,059	1	24,055
Pædiatric.....	2	1	20,416	63,998	1	652	Nil	—
Tuberculosis.....	6	4	4,151	13,266	1	5,944	1	3,486
Manitoba	9	4	8,816	42,811	Nil	—	5	53,604
General.....	6	3	4,842	17,226	Nil	—	3	46,113
Pædiatric.....	1	1	3,974	25,585	Nil	—	Nil	—
Tuberculosis.....	2	Nil	—	—	Nil	—	2	7,491
Saskatchewan	3	1	764	1,672	2	3,818	Nil	—
General.....	2	1	764	1,672	1	645	Nil	—
Tuberculosis.....	1	Nil	—	—	1	3,173	Nil	—
Alberta	3	3	10,299	80,592	Nil	—	Nil	—
General.....	2	2	10,258	80,716	Nil	—	Nil	—
Pædiatric.....	1	1	41	176	Nil	—	Nil	—
British Columbia	5	2	4,035	6,021	1	1,651	2	60,753
General.....	5	2	4,035	6,021	1	1,651	2	60,753
N.W.T.	1	—	—	—	—	—	—	—
General.....	1	—	—	—	—	—	—	—

¹ No report.

Subsection 2.—Statistics of Mental Hospitals.

The Census of Mental Institutions of Canada for June 1, 1931, gave the number of patients in all mental institutions as 31,686, of whom 24,188 were insane, 7,006 mentally deficient, and 492 epileptic. The number of patients in mental institutions per 100,000 of the general population was 305.4 on June 1, 1931, 316.5 on Dec. 31, 1932, 324.9 on Dec. 31, 1933, 335.6 on Dec. 31, 1934, and 348.2 on Dec. 31, 1935.

At Dec. 31, 1936, there were 39,833 patients in mental institutions in Canada, and 3,247 on parole, making a total of 43,080, whereas the normal bed capacity was only 37,379, showing a seriously overcrowded situation over a period when the patient population on Jan. 1, 1936, and the admissions and separations during the year are considered. This overcrowded condition is specially marked in British Columbia, Manitoba, Saskatchewan, Ontario, and Quebec. Of the 39,833 resident patients in 1936, 31,268 were insane, 7,711 were mentally deficient, 603 were epileptic, and 251 mental cases were otherwise classified. The patients per 100,000 of population at the end of the year were 359.5. Table 5 gives general statistics of mental institutions for 1936.

5.—Statistics of Capacity, Staff, Movement of Population, and Finances of Mental Institutions in Canada, by Provinces, calendar year 1936.

Item.	Prince Edward Island.	Nova Scotia.	New Brun- swick.	Quebec.	Ontario.
Institutions reporting.....No.	1	16	1	9	16
Normal capacities.....“	275	2,126	1,025	11,484	13,050
Staff—					
Doctors, full time.....“	2	5	4	51	88
Doctors, part time.....“	Nil	15	1	16	32
Graduate nurses.....“	11	32	12	217	592
Other nurses.....“	8	62	Nil	357	291
Totals, Staff¹.....“	69	339	129	2,253	2,707
Movement of Population—					
Admissions.....“	97	545	273	3,271	4,544
Totals, under Treatment.....“	353	2,583	1,314	15,606	18,877
Separations.....“	93	522	233	2,604	3,999
Receipts—					
Government and municipal payments.....\$	99,929	494,476	124,517	2,712,072	3,146,381
Fees from paying patients.....\$	11,285	13,248	33,638	400,936	1,034,331
Received from other sources.....\$	Nil	52,202	140,349	1,525,310	481,441
Totals, Receipts.....\$	111,214	559,926	298,504	4,638,318	4,662,153²
Expenditures—					
Salaries.....\$	35,268	207,418	72,809	1,057,743	2,539,089
Provisions.....\$	31,842	143,823	74,373	778,058	909,530
All other expenditures for maintenance.....\$	44,104	166,638	102,822	997,762	1,058,861
Totals, Expenditures for Maintenance.....\$	111,214	522,879	250,004	2,833,563	4,507,480
New buildings and improvements.....\$	Nil	34,764	48,500	1,311,186	Nil
Expenditures for other purposes.....\$	Nil	2,060	Nil	485,963	93,540
Totals, Expenditures.....\$	111,214	559,703	298,504	4,630,712	4,601,020²

For footnotes, see end of table, p. 1014.

5.—Statistics of Capacity, Staff, Movement of Population, and Finances of Mental Institutions in Canada, by Provinces, calendar year 1936—concluded.

Item.	Manitoba.	Saskatchewan.	Alber'ta.	British Columbia.	Total.
Institutions reporting.....No.	4	2	4	4	57
Normal capacities.....“	2,272	2,600	2,092	2,455	37,379
Staff—					
Doctors, full time.....“	18	6	13	17	204
Doctors, part time.....“	3	3	Nil	2	72
Graduate nurses.....“	71	11	53	33	1,032
Other nurses.....“	105	119	58	129	1,129
Totals, Staff¹.....“	544	475	426	596	7,538
Movement of Population—					
Admissions.....“	793	778	894	910	12,105
Totals, under Treatment.....“	3,471	3,721	3,174	4,227	53,326
Separations.....“	696	588	736	775	10,246
Receipts—					
Government and municipal payments.....\$	753,561	1,126,272	718,551	888,290	10,064,049
Fees from paying patients.....\$	74,311	103,984	85,032	217,346	1,974,131
Received from other sources.....\$	24,711	4,957	25,672	8,130	2,262,772
Totals, Receipts.....\$	852,583	1,235,213	829,275	1,113,766	14,300,952²
Expenditures—					
Salaries.....\$	343,890	417,596	436,307	462,101	5,572,221
Provisions.....\$	201,658	243,403	146,540	265,339	2,799,566
All other expenditures for maintenance.....\$	275,837	385,557	166,256	374,192	3,572,029
Totals, Expenditures for Maintenance.....\$	821,385	1,046,556	749,103	1,101,632	11,943,816
New buildings and improvements.....\$	2,016	188,657	80,172	3	1,665,295
Expenditures for other purposes.....\$	29,182	3	3	2,282	613,027
Totals, Expenditures.....\$	852,583	1,235,213	829,275	1,103,914	14,222,135²

¹ Includes other personnel.
are not included.

² Receipts and expenditures for the Ontario Hospital, Fort William, are not included.

³ None reported.

Subsection 3.—Charitable and Benevolent Institutions.

Statistics of institutions which care for the indigent, the aged and infirm, orphans, dependent and neglected children, the deaf and dumb and the blind, are shown by provinces in Table 6. Such statistics are now collected quinquennially and figures for 1931 will be found at page 1018 of the 1936 edition of the Year Book.

6.—Summary Statistics of Charitable and Benevolent Institutions in Canada, by Provinces, June 1, 1936.

Item.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
Institutions ¹No.	6	48	28	126	173
Personnel.....“	58	370	275	4,413	1,675
Inmates—					
Adults.....“	187	1,676	532	6,192	5,295
Children.....“	233	2,299	993	12,363	13,688
Totals, Inmates.....“	420	3,975	1,525	18,555	18,983
Receipts—					
Grants and maintenance payments.....\$	9,408	338,815	91,754	1,603,735	2,027,163
Receipts from paying inmates.....\$	13,954	94,262	40,322	673,269	559,789
All other receipts.....\$	8,553	131,210	167,558	1,473,447	641,524
Totals, Receipts.....\$	31,915	564,287	299,634	3,750,451	3,228,476
Expenditures—					
Salaries and wages.....\$	9,430	118,471	62,821	625,689	819,892
Provisions (food).....\$	8,740	180,179	70,118	1,105,235	801,024
Fuel, power, light and water.....\$	4,829	51,390	25,848	456,898	275,163
All other expenditures.....\$	6,983	226,702	125,611	1,930,506	1,343,502
Totals, Expenditures.....\$	29,982	576,742	284,398	4,118,328	3,239,581

¹ These institutions are classified in Table 1.

**6.—Summary Statistics of Charitable and Benevolent Institutions in Canada,
by Provinces, June 1, 1936—concluded.**

Item.	Mani- toba.	Sas- katche- wan.	Alberta.	British Colum- bia.	Total.
Institutions ¹No.	30	10	12	21	454 ²
Personnel....."	319	64	71	177	7,422
Inmates—					
Adults....."	336	14	68	381	14,681
Children....."	1,589	327	603	1,318	33,413
Totals, Inmates....."	1,925	341	671	1,699	48,094
Receipts—					
Grants and maintenance payments.....\$	276,961	29,752	38,289	268,730	4,684,607
Receipts from paying inmates.....\$	66,677	5,488	26,671	67,337	1,547,769
All other receipts.....\$	66,372	42,881	24,881	71,745	2,628,171
Totals, Receipts.....\$	410,010	78,121	89,841	407,812	8,860,547
Expenditures—					
Salaries and wages.....\$	100,361	16,291	19,077	88,864	1,860,896
Provisions (food).....\$	77,792	14,356	23,953	52,218	2,333,620
Fuel, power, light and water.....\$	46,517	8,840	8,109	23,204	900,798
All other expenditures.....\$	196,141	35,822	37,484	226,140	4,128,891
Totals, Expenditures.....\$	420,811	75,309	88,628	390,426	9,224,205

¹ These institutions are classified in Table 1.

² Five institutions did not report and are not included.

Subsection 4.—Corrective and Reformative Institutions.

Summary statistics under this heading collected at the Census of 1931 were given at page 1019 of the 1936 edition of the Year Book. These statistics are now being collected quinquennially and figures for 1936 are given in Table 7. The reader will find detailed statistics of crime and delinquency (which are presented on an annual basis), as distinct from these institutional statistics, in Chapter XXVII immediately following this chapter.

**7.—Summary Statistics of Corrective and Reformative Institutions, by Provinces,
June 1, 1936.**

NOTE.—The figures in this table differ from those shown at p. 998 of the 1937 Year Book in that the statistics for corrective and reformative institutions are now final, while those for penitentiaries have been eliminated, as statistics for these latter may be found in the following chapter.

Item.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.
Institutions ¹No.	4	3	4	10	3
Personnel....."	68	40	144	456	58
Inmates—					
Adults (16 years or over)....."	90	49	423	1,806	93
Juveniles (under 16 years)....."	198	54	426	292	47
Totals, Inmates....."	288	103	849	2,098	140
Receipts—					
Grants—Provincial.....\$	29,889	17,225	164,032	819,566	64,352
Municipal.....\$	24,848	16,275	2	208,237	3
From all other sources.....\$	26,211	13,755	94,352	614,745	2,639
Totals, Receipts.....\$	80,948	47,255	258,384	1,642,548	66,991
Expenditures—					
Salaries.....\$	27,668	14,127	52,792	455,272	28,341
Provisions (food).....\$	15,878	6,193	53,013	232,645	11,999
Fuel, power and light.....\$	6,977	3,773	23,572	79,424	15,636
All other expenditures for maintenance.....\$	17,830	8,430	96,608	257,957	19,641
Totals, Expenditures for Main- tenance.....\$	68,353	32,523	225,985	1,025,298	75,617
Non-maintenance expenditures.....\$	15,184	10,985	104,927	604,672	3,153
Totals, Expenditures.....\$	83,537	43,508	330,912	1,629,970	78,770

¹ These institutions are classified in Table 1.

² None reported.

**7.—Summary Statistics of Corrective and Reformative Institutions, by Provinces,
June 1, 1936—concluded.**

Item.	Saskat- chewan.	Alberta.	British Columbia.	Total. ²
Institutions ¹No.	2	2	2	30
Personnel.....“	26	23	39	854
Inmates—				
Adults (16 years or over).....“	54	47	60	2,622
Juveniles (under 16 years).....“	37	17	30	1,101
Totals, Inmates.....“	91	64	90	3,723
Receipts—				
Grants—Provincial.....\$	62,513	2,564	54,016	1,214,157
Municipal.....\$	3	842	13,794	263,996
From all other sources.....\$	98	9,421	4,651	765,872
Totals, Receipts.....\$	62,611	12,827	72,461	2,244,025
Expenditures—				
Salaries.....\$	34,456	2,504	35,966	651,126
Provisions (food).....\$	7,836	4,045	10,613	342,222
Fuel, power and light.....\$	5,579	1,914	7,282	144,157
All other expenditures for maintenance.....\$	14,642	2,918	13,868	451,894
Totals, Expenditures for Maintenance.....\$	62,513	11,381	67,729	1,569,399
Non-maintenance expenditures.....\$	3	1,029	4,732	744,682
Totals, Expenditures.....\$	62,513	12,410	72,461	2,314,081

¹ These institutions are classified in Table 1.
Edward Island.

³ None reported.

² There are no institutions of this class in Prince

Section 3.—The Victorian Order of Nurses.

The Victorian Order of Nurses was created in 1897 for the definite purpose of establishing trained nurses in localities such as villages and townships remote from hospital centres. With the growth of the Order, the field of activity was broadened to meet the demands of health and social agencies in the large centres of population, but the main work of the Order is still carried out in the villages and rural areas of population.

The primary function of the Victorian Order is bedside nursing and teaching of health in the homes visited. Three types of care are given by the nurses, *viz.*, maternal and infant welfare, general nursing, and health education. During 1936, the Order had 343 trained nurses in the field and 78 Branches distributed as follows: Nova Scotia, 14; New Brunswick, 5; Quebec, 5; Ontario, 43; Manitoba, 1; Saskatchewan, 2; Alberta, 2; and British Columbia, 6. During 1936, 727,400 visits were made to 82,021 patients, which was a slight decrease in the work as a whole. The average number of visits per case was 8.9. Of the total visits paid, 433,668 or 59.6 p.c. were free while fully-paid visits constituted 24.7 p.c. (of which 17 p.c. were insurance) and part-paid visits 15.7 p.c. Maternal and welfare cases constituted 56.4 p.c. of the total visits paid.

The maternal death rate per 1,000 living births attended by Victorian Order nurses for the past five years was 2.2.

Section 4.—The Canadian Red Cross Society.*

Closely allied with the Dominion and Provincial Governments in activities to promote the health of the people is the Canadian Red Cross Society. Founded in 1896, its purposes are (1) to furnish volunteer aid to the sick and wounded of armies in time of war, and (2) in time of peace to carry on and assist in work for the improvement of health, the prevention of disease and the mitigation of suffering.

The more important phases of the peace-time work carried on by the Society are: (a) the continuing care of sick and disabled ex-service men; (b) the operation of Red Cross outpost hospitals; (c) the promotion of Junior Red Cross and the treatment of crippled or otherwise disabled children; (d) the maintenance of a disaster relief organization fully prepared for immediate action in any emergency; (e) the organization of classes for the study of home nursing and nutrition; (f) the care of immigrant women and children at the Port of Halifax; (g) the training and supplying of visiting housekeepers for families when the homemaker is ill; (h) co-operation with government departments and other voluntary organizations in combating disease, the promotion of child welfare, and the care of the physically defective; (i) in general, provision for the needs of the distressed and destitute.

Since the inception of the peace-time program in 1920, the Red Cross Society has established outpost hospital service in 70 centres in Canada's northland. Twenty-four of these have been handed over to their communities, four have been found no longer necessary, and in 1937 there were 42 outpost hospitals operating under the emblem of the Red Cross. In 1937, Red Cross outposts cared for 36,803 patients, of which number 7,296 were in-patients with a total of 78,369 hospital days' treatment. Without the aid of these outposts, thousands of our fellow-citizens who gain their livelihood on the fringes of the settled parts of Canada would have lacked any kind of skilled assistance when sickness or injury overtook them.

Junior Red Cross, a movement for the children of elementary and sometimes secondary schools, is devoted to the promotion of the principles of health, good citizenship, and international friendliness. Guided only by the teacher-mentor, the children work out their own program of personal and school hygiene, community service, and interchange of handicrafts and information with the Juniors of other lands. Though primarily an educational movement, it is significant that since its inception, the Canadian Junior Red Cross has helped over 14,000 crippled or otherwise disabled children. Junior Red Cross now embraces a membership of over 17,000,000 children in 52 nations of the world. In Canada for the school year 1936-37, 11,927 branches were enrolled with a total membership of 364,335.

The consolidated financial statement of the Society for 1937 showed total receipts of \$1,273,782, of which \$956,618 consisted of voluntary contributions. Gross expenditures were \$1,279,175, of which the major items were \$463,484 on disaster relief, \$299,679 for outpost hospitals, \$118,215 on assistance to soldiers and their dependants, \$44,796 for the treatment of crippled children, \$104,276 on general relief, \$45,792 on the organization of the Junior Red Cross, and \$24,037 for home nursing, visiting housekeeper, and nutrition services.

* Revised by W. S. Caldwell, M.D., Assistant Director, Ontario Division, The Canadian Red Cross Society, Toronto.

CHAPTER XXVII.—JUDICIAL AND PENITENTIARY STATISTICS.*

Canadian Criminal Law and Procedure.—An account of the development of the Criminal Code in Canada was given at pp. 1085-1087 of the 1934-35 edition of the Year Book. In this article a résumé of procedure and of the extent and jurisdiction of the various classes of judges and magistrates was given.

The statistics presented in the tables that follow, which are summarized from the Annual Report of Statistics of Criminal and Other Offences, are collected directly from the criminal courts in the different judicial districts throughout the Dominion. There are 155 judicial districts, including 2 sub-districts, divided as to provinces as follows: Prince Edward Island 3, Nova Scotia 18, New Brunswick 15, Quebec 24, Ontario 47, Manitoba 6, Saskatchewan 21, Alberta 12, British Columbia 8, and Yukon 1. The figures for the Northwest Territories are obtained from the reports of the Royal Canadian Mounted Police.

Section 1.—General Tables.

The collection and publication of criminal statistics now made by the Dominion Bureau of Statistics was initiated in 1876 (39 Vict., c. 13). All records of crime in that period are now available in publications of the Judicial Statistics Branch of the Bureau. The statistics relate to years ended Sept. 30, the latest report being for 1936. Beginning with the report for 1922, an enlargement of the classification of offences has been adopted, by which offences of juvenile offenders are compiled separately from those of adults.

Crime is divided into two definite classes, 'criminal' or 'indictable offences', which include all serious crime covered by the Criminal Code (see Section 2, p. 1022), and 'summary' or 'non-indictable offences', which comprise breaches of municipal by-laws, traffic laws, and other less serious crimes (see Section 3, p. 1027). Broadly speaking, indictable offences are triable by jury, although in certain cases the accused is accorded the right of election as to whether he be tried by jury or before a judge without the intervention of a jury, and in other cases the jurisdiction of the magistrate as to trial is absolute and does not depend upon the consent of the accused. Non-indictable offences are usually dealt with summarily by police magistrates under the Summary Convictions Act, and comprise breaches of municipal regulations and other minor offences. The term indictable applies to offences of adults only, similar offences committed by juveniles being termed 'major' offences; similarly, non-indictable offences of adults are termed 'minor' offences when attributed to juveniles. Returns of criminal court proceedings for the year ended Sept. 30, 1936, showed that 420,247 trials were held as compared with 402,148 during the previous year. The figures showed 42,541 indictable and 377,706 non-indictable cases, as compared with 39,506 indictable and 362,642 non-indictable cases during the previous year. Of the indictable offences, 36,059 were convictions as compared with 33,531 during 1935. The 36,059 convictions during 1936 were comprised of 32,689 males and 3,370 females. In 1935, 30,195 males and 3,336 females were convicted.

Previous to 1922, however, the classification into criminal and minor offences was followed in classifying statistics; the historical Table 1 and the more detailed

* Revised by H. M. Boyd, Chief, Judicial Statistics Branch, Dominion Bureau of Statistics. The sixty-first Annual Report of Statistics of Criminal and Other Offences, for the year ended Sept. 30, 1936, is obtainable on application from the Dominion Bureau of Statistics.

short-term statistics of Table 2 continue the classification on a comparable basis, giving the totals for all offences, *i.e.*, different classes of criminal offences and minor offences, including those of juvenile delinquents. In connection with Table 1, it should be remembered that, while the Criminal Code undergoes little change over periods of time, the figures of summary convictions are influenced very much by the changing customs of the people, and are apt to increase with the increasing urbanization of the population. The most significant column of this table is the figure of criminal offences per 100,000 of population. Attention may be drawn to the increase in the proportion of both criminal offences and minor offences to population in recent years, convictions for criminal offences having risen from 284 per 100,000 population in 1921 to 425 in 1931 and 412 in 1936, and convictions for minor offences from 1,731 per 100,000 in 1921 to 3,113 in 1931 and 3,405 in 1936.

It should be understood that the classification of offences in these general tables is irrespective of the mode of procedure. That is to say, the headings "criminal" include many indictable offences disposed of summarily under the Summary Trials Act. Hence any addition of indictable and major and minor offences, as shown in other tables, will not agree with the figures given in Tables 1 and 2. The object here is to show a broad historical record of criminal and minor offences, respectively.

1.—Convictions for Criminal Offences, by Classes, Convictions for Minor Offences, and Total Convictions, with Proportions to Population, years ended Sept. 30, 1911-36.

NOTE.—For figures for the years 1876-1910, see p. 993 of the 1930 Year Book.

Year.	Criminal Offences.							Minor Offences, Total and Ratios.			Total Criminal and Minor Offences.
	Offences against—			Other Felonies and Misde- mean- ours.	Total and Ratios of Criminal Offences.						
	The Person.	Pro- perty with Vio- lence.	Pro- perty with- out Vio- lence.								
	No.	No.	No.	No.	No.	P.C. of All Of- fences.	Per 100,000 Pop.	No.	P.C. of All Of- fences.	Per 100,000 Pop.	No.
1911...	8,352	977	9,024	1,194	19,547	17.3	271	93,713	82.7	1,300	113,260
1912...	9,371	1,195	10,626	1,540	22,732	15.5	308	123,795	84.5	1,675	146,527
1913...	11,444	1,472	12,721	1,724	27,361	15.8	359	145,777	84.2	1,910	173,138
1914...	12,136	1,810	14,645	1,952	30,543	16.7	388	152,492	83.3	1,935	183,035
1915...	10,664	2,234	14,269	1,525	28,692	18.7	360	124,363	81.3	1,558	153,055
1916...	9,327	1,478	11,018	1,459	23,282	18.8	291	100,509	81.2	1,256	123,791
1917...	6,852	1,321	9,886	1,271	19,330	16.9	240	94,681	83.1	1,175	114,011
1918...	7,292	2,049	10,743	1,390	21,474	17.4	264	101,795	82.6	1,249	123,269
1919...	7,731	2,606	11,508	1,656	23,501	18.1	283	106,518	81.9	1,282	130,019
1920...	8,281	2,310	11,634	2,059	24,284	14.9	284	138,424	85.1	1,618	162,708
1921...	8,197	2,609	12,059	2,081	24,946	14.2	284	152,227	85.9	1,731	177,173
1922...	7,291	2,783	11,607	2,610	24,291	15.3	272	134,049	84.7	1,503	158,340
1923...	7,550	2,076	11,482	3,075	24,183	15.1	268	135,069	84.8	1,499	159,252
1924...	7,595	2,536	12,790	2,635	25,556	15.3	279	141,663	84.7	1,549	167,219
1925...	7,826	2,749	13,892	2,644	27,111	15.3	292	150,672	84.7	1,621	177,783
1926...	7,799	2,296	14,262	2,679	27,036	13.8	286	169,171	86.2	1,790	196,207
1927...	8,343	2,671	15,154	2,809	28,977	13.1	301	191,285	86.9	1,985	220,262
1928...	9,140	2,991	16,072	3,856	32,059	11.6	326	243,123	88.4	2,472	275,182
1929...	10,392	3,529	17,271	4,001	35,193	10.9	351	286,773	89.1	2,859	321,966
1930...	11,052	4,647	18,498	6,584	40,781	11.8	400	304,860	88.2	2,986	345,641
1931...	11,773	5,288	21,528	5,475	44,064	12.0	425	323,024	88.0	3,113	367,088
1932...	10,327	5,194	20,766	5,510	41,797	12.4	402	294,858	87.6	2,842	336,655
1933...	9,603	5,319	21,575	6,096	42,593	12.8	411	290,475	87.2	2,799	333,068
1934...	9,284	5,310	21,071	6,330	41,995	11.4	404	326,239	88.6	3,145	368,234
1935...	9,672	5,178	21,703	7,206	43,759	10.8	420	360,093	89.2	3,472	403,852
1936...	9,995	5,860	22,065	7,674	45,594	10.8	412	375,381	89.2	3,405	420,975

Pardons.—The total number of cases in which the prerogative of mercy was exercised during 1936 was 1,495; of these 53 were not imprisoned, and were granted remittance or reduction of fines, etc. In 716 cases release on ticket of leave was granted, and 635 were released unconditionally, 46 were deported, 57 fines were remitted or reduced; 3 death sentences were commuted and 85 cases disposed of in various other manners. These figures relate to the judicial year ended Sept. 30, and are not therefore comparable with those given in Section 6, Penitentiary Statistics.

2.—Convictions for Criminal and Minor Offences, by Class of Offence, Compared as to Numbers and Ratios, years ended Sept. 30, 1932-36 (Including Juveniles).

NUMBERS.

Class of Offence.	1932.	1933.	1934.	1935.	1936.
	No.	No.	No.	No.	No.
CRIMINAL OFFENCES—					
Offences against the person.....	10,327	9,603	9,284	9,672	9,995
Offences against property with violence.....	5,194	5,319	5,310	5,178	5,860
Offences against property without violence.....	20,766	21,575	21,071	21,703	22,065
Other felonies and misdemeanours.....	5,510	6,096	6,330	7,206	7,674
TOTALS, CRIMINAL OFFENCES.....	41,797	42,593	41,995	43,759	45,594
MINOR OFFENCES—					
Breach of municipal Acts and by-laws.....	204,981	201,990	233,331	264,171	257,972
Breach of liquor laws.....	12,231	10,491	10,761	8,833	10,084
Drunkenness.....	22,671	18,912	20,769	25,650	28,438
Vagrancy.....	12,409	11,182	6,507	8,156	7,368
Loose, idle, and disorderly.....	3,862	2,497	4,874	5,745	7,576
Keeping bawdy houses and inmates thereof.....	6,036	5,692	3,945	4,328	4,386
Miscellaneous minor offences.....	32,668	39,711	46,052	43,210	59,557
TOTALS, MINOR OFFENCES.....	294,858	290,475	326,239	360,093	375,381
Grand Totals.....	336,655	333,068	368,234	403,852	420,975

RATIOS PER CENT OF TOTAL AND PER 100,000 OF POPULATION.

Class of Offence.	1932.		1933.		1934.		1935.		1936.	
	Per Cent.	Per 100,000 Pop.	Per Cent.	Per 100,000 Pop.	Per Cent.	Per 100,000 Pop.	Per Cent.	Per 100,000 Pop.	Per Cent.	Per 100,000 Pop.
CRIMINAL OFFENCES—										
Offences against the person.....	3.1	101	2.9	93	2.5	89	2.4	93	2.4	92
Offences against property with violence.....	1.5	48	1.6	51	1.4	51	1.3	51	1.4	53
Offences against property without violence.....	6.2	201	6.5	209	5.8	203	5.4	210	5.2	198
Other felonies and misdemeanours.....	1.6	52	1.8	58	1.7	61	1.7	66	1.8	69
TOTALS, CRIMINAL OFFENCES	12.4	402	12.8	411	11.4	404	10.8	420	10.8	412
MINOR OFFENCES—										
Breach of municipal Acts and by-laws.....	60.9	1,979	60.6	1,945	63.4	2,254	65.4	2,545	61.3	2,340
Breach of liquor laws.....	3.6	117	3.1	100	2.9	103	2.2	86	2.4	92
Drunkenness.....	6.7	217	5.7	183	5.6	200	6.4	249	6.8	260
Vagrancy.....	3.7	120	3.4	109	1.8	62	2.0	78	1.8	68
Loose, idle, and disorderly	1.1	36	0.8	26	1.3	46	1.4	55	1.8	69
Keeping bawdy houses and inmates thereof.....	1.8	58	1.7	55	1.1	37	1.1	43	1.0	38
Miscellaneous minor offences.....	9.7	315	11.9	381	12.5	443	10.7	416	14.1	538
TOTALS, MINOR OFFENCES..	87.6	2,842	87.2	2,799	88.6	3,145	89.2	3,472	89.2	3,405
Grand Totals.....	100.0	3,244	100.0	3,210	100.0	3,549	100.0	3,892	100.0	3,817

The recent trend of total convictions, including those of juveniles, and of sentences imposed, is shown by provinces for the years 1930 to 1936 in Table 3. Death sentences for all provinces except British Columbia show a downward trend during the period covered in Table 3. In the latter province, they were abnormally high in 1936 and in fact exceeded those of either Ontario or Quebec—provinces with four or five times the population of British Columbia. Increases in the numbers of convictions are shown in every province except Quebec and in the Territories.

3.—Convictions and Sentences for All Offences, by Provinces, years ended Sept. 30, 1930-36.

Province and Item.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	No.	No.	No.	No.	No.	No.	No.
Canada—							
Convictions.....	345,641	367,088	336,655	333,068	368,234	403,852	420,975
Sentences—							
Penitentiary.....	3,013	3,129	2,892	2,485	2,260	2,656	2,905
Gaol or fine.....	266,777	274,483	242,128	248,177	286,358	311,008	329,117
Reformatory.....	943	1,226	1,156	830	967	1,210	3,351
Death.....	17	25	23	24	19	15	22
Other sentences.....	74,891	88,225	90,456	81,552	78,630	88,963	85,580
Prince Edward Island—							
Convictions.....	975	910	909	737	831	1,017	1,051
Sentences—							
Penitentiary.....	2	6	18	16	16	7	13
Gaol or fine.....	956	871	853	688	776	913	989
Reformatory.....	6	4	6	4	8	7	9
Death.....	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Other sentences.....	11	29	32	29	31	90	40
Nova Scotia—							
Convictions.....	7,499	6,725	4,907	5,432	5,651	6,132	7,157
Sentences—							
Penitentiary.....	118	132	152	127	133	123	137
Gaol or fine.....	6,720	5,971	4,129	4,474	4,615	5,239	6,073
Reformatory.....	65	45	46	39	79	76	78
Death.....	1	1	1	3	2	1	Nil
Other sentences.....	595	576	579	789	822	693	864
New Brunswick—							
Convictions.....	4,727	5,380	4,628	4,318	4,400	4,899	5,701
Sentences—							
Penitentiary.....	49	108	92	110	70	68	72
Gaol or fine.....	4,130	4,524	4,016	3,519	3,560	3,778	4,769
Reformatory.....	53	40	65	63	58	48	46
Death.....	1	Nil	Nil	1	1	Nil	2
Other sentences.....	494	708	455	625	711	1,005	812
Quebec—							
Convictions.....	67,219	106,941	121,191	127,416	125,533	130,337	122,932
Sentences—							
Penitentiary.....	754	765	803	659	683	761	741
Gaol or fine.....	51,405	86,729	97,702	108,031	108,885	111,752	96,531
Reformatory.....	67	109	268	280	229	271	293
Death.....	5	6	6	5	4	7	5
Other sentences.....	14,988	19,332	22,412	18,441	15,732	17,546	25,362
Ontario—							
Convictions.....	178,795	168,069	146,393	140,256	175,083	206,169	221,263
Sentences—							
Penitentiary.....	926	834	775	826	740	869	901
Gaol or fine.....	135,315	118,674	95,631	94,968	129,695	150,758	175,738
Reformatory.....	430	736	531	261	393	548	2,657
Death.....	5	6	6	10	1	3	6
Other sentences.....	42,119	47,819	49,450	44,191	44,254	53,991	41,961

3.—Convictions and Sentences for All Offences, by Provinces, years ended Sept. 30, 1930-36—concluded.

Province and Item.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	No.	No.	No.	No.	No.	No.	No.
Manitoba—							
Convictions.....	30,540	27,002	22,343	19,100	20,398	18,649	20,431
Sentences—							
Penitentiary.....	303	528	482	251	243	294	305
Gaol or fine.....	19,561	14,737	10,410	7,149	8,546	9,012	11,035
Reformatory.....	176	168	163	123	107	117	100
Death.....	Nil	2	4	3	3	1	2
Other sentences.....	10,500	11,567	11,284	11,574	11,499	9,225	8,989
Saskatchewan—							
Convictions.....	14,386	13,760	9,687	8,564	8,292	8,067	8,182
Sentences—							
Penitentiary.....	115	115	90	54	58	92	171
Gaol or fine.....	12,631	11,822	8,101	7,345	7,124	6,805	6,976
Reformatory.....	48	35	21	22	42	42	36
Death.....	3	1	3	2	3	2	Nil
Other sentences.....	1,589	1,787	1,472	1,141	1,065	1,006	999
Alberta—							
Convictions.....	16,080	16,589	10,853	12,538	11,077	11,202	12,364
Sentences—							
Penitentiary.....	424	291	187	152	177	194	371
Gaol or fine.....	12,936	12,293	8,017	9,672	8,513	8,595	9,512
Reformatory.....	26	15	8	10	9	15	22
Death.....	1	6	Nil	Nil	2	1	Nil
Other sentences.....	2,693	3,984	2,641	2,704	2,376	2,397	2,459
British Columbia—							
Convictions.....	25,286	21,548	15,647	14,602	16,899	17,344	21,793
Sentences—							
Penitentiary.....	322	349	291	290	139	248	192
Gaol or fine.....	22,998	18,727	13,185	12,244	14,587	14,015	17,395
Reformatory.....	72	74	48	28	42	86	110
Death.....	1	3	2	Nil	3	Nil	7
Other sentences.....	1,893	2,395	2,121	2,040	2,128	2,995	4,089
The Territories—							
Convictions.....	134	164	97	105	70	96	101
Sentences—							
Penitentiary.....	Nil	1	2	Nil	1	Nil	2
Gaol or fine.....	125	135	84	87	57	81	94
Reformatory.....	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Death.....	Nil	Nil	1	Nil	Nil	Nil	Nil
Other sentences.....	9	28	10	18	12	15	5

Section 2.—Indictable Offences of Adults.

The progress of a community, from a moral point of view, is often judged by the number of convictions for indictable offences, as these are less affected than non-indictable offences by extraneous circumstances and the varying methods of law enforcement in different areas and in different years. However, in the study of such statistics it is important to have comparable figures over a period of years, and these are set out by provinces for each year since 1911 in Table 4. Again, in Table 5 are shown the numbers of charges and convictions and the percentages of acquittals for the three years ended Sept. 30, 1934-36.

It may be stated that during the thirty-six year period from 1900 to 1936 crimes increased from 4,853 to 36,059 or 643 p.c. The increase in the population during the same period was but 108.4 p.c., revealing that the increase in the crime rate was six times that of the population.

4.—Convictions of Persons 16 Years of Age or Over for Indictable Offences, by Provinces, years ended Sept. 30, 1911-36.

NOTE.—For figures for 1900-10, see p. 1016 of the 1933 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W.T.	Canada.
No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1911.....	19	356	123	1,865	5,067	888	957	870	1,015	24	4	11,188
1912.....	11	657	107	2,052	5,456	1,121	1,204	1,513	1,532	26	7	13,686
1913.....	8	598	140	2,336	6,272	1,331	1,594	1,908	1,794	26		16,007
1914.....	18	669	179	2,918	7,479	1,284	1,889	2,235	2,112	27		18,810
1915.....	12	840	206	2,427	7,112	1,362	1,993	2,082	1,517	24		17,575
1916.....	11	519	241	3,166	6,023	914	1,711	1,895	1,503	20		16,003
1917.....	21	427	228	2,667	4,824	755	1,057	894	1,058	22		11,953
1918.....	12	563	230	2,916	6,111	811	1,067	886	659	11		13,266
1919.....	14	663	241	2,960	6,605	919	1,134	1,028	951	5	1	14,520
1920.....	4	580	375	2,517	6,707	987	1,467	1,233	1,212	6		15,088
1921.....	15	712	313	2,654	7,548	1,159	1,220	1,263	1,282	3		16,169
1922.....	27	701	322	2,885	7,021	1,188	1,391	1,171	1,004	10		15,720
1923.....	13	400	148	2,655	6,886	1,094	1,446	1,424	1,116	6		15,188
1924.....	25	595	224	2,729	7,180	1,160	1,647	1,423	1,265	10		16,258
1925.....	3	624	244	3,084	7,751	1,215	1,654	1,254	1,385	2	3	17,219
1926.....	14	752	222	3,053	7,248	1,383	2,052	1,463	1,252	3	6	17,448
1927.....	14	680	287	3,621	7,962	1,457	1,492	1,483	1,833	3	4	18,836
1928.....	43	891	365	4,299	9,052	1,672	1,761	1,701	1,931	5	Nil	21,720
1929.....	55	869	358	4,780	9,489	1,988	1,918	2,201	2,425	8	6	24,097
1930.....	59	875	354	5,540	11,774	2,272	2,355	2,525	2,694	6	3	28,457
1931.....	57	1,184	461	5,737	12,000	3,102	2,716	2,887	3,385	8	5	31,542
1932.....	78	1,072	514	7,086	12,428	2,982	1,893	2,241	3,072	6	11	31,383
1933.....	70	1,160	479	7,713	13,152	2,667	2,049	2,544	3,094	7	7	32,942
1934.....	88	992	525	7,687	11,761	2,571	2,396	2,708	2,946	3	7	31,684
1935.....	59	1,002	576	9,354	12,653	2,382	1,976	2,424	3,088	3	14	33,531
1936.....	75	1,147	744	9,497	13,594	2,631	2,194	3,138	3,021	8	10	36,059

¹ Included with Manitoba since that part of the N.W.T. from which earlier returns were received was included in Manitoba by the Extension of Boundaries Act, 1912. Later figures are for the present area of the N.W.T.

In Table 5, which shows charges, convictions, and acquittals, by provinces, convictions for indictable offences show increases in 1936 compared to 1935 in every province with the exception of British Columbia.

5.—Charges, Convictions, and Percentages of Acquittals for Indictable Offences, by Provinces, years ended Sept. 30, 1934-36.

NOTE.—The figures of this table do not include charges or convictions of juvenile delinquents.

Province.	Numbers.						Percentages of Acquittals.		
	1934.		1935.		1936.		1934.	1935.	1936.
	Char- ges.	Convic- tions.	Char- ges.	Convic- tions.	Char- ges.	Convic- tions.			
Prince Edward Island.....	93	88	69	59	83	75	5.4	14.5	9.6
Nova Scotia.....	1,214	992	1,224	1,002	1,389	1,147	18.3	18.1	17.4
New Brunswick.....	604	525	619	576	806	744	13.1	7.0	7.7
Quebec.....	8,953	7,687	10,658	9,354	10,626	9,497	14.1	12.2	10.6
Ontario.....	14,280	11,761	15,717	12,653	16,639	13,594	17.6	19.5	18.3
Manitoba.....	3,206	2,571	2,781	2,382	3,106	2,631	19.8	14.4	15.3
Saskatchewan.....	2,634	2,396	2,189	1,976	2,491	2,194	9.0	9.7	11.9
Alberta.....	2,942	2,703	2,680	2,424	5,880	3,138	7.9	9.6	19.1
British Columbia.....	3,470	2,946	3,549	3,088	3,501	3,021	14.5	12.9	13.7
The Territories.....	12	10	20	17	20	18	16.7	15.0	10.0
Canada.....	37,408	31,684	39,506	33,531	42,541	36,059	15.3	15.1	15.2

Classes of Indictable Offences and Analysis of Convictions.—Each of the six classes into which indictable offences are divided showed an increase in the number of total convictions, the 1936 figure being 36,059 as compared with 33,531 in 1935, an increase of 2,528, or 7.54 p.c.

Offences Against the Person.—The increase in this class was 472 or 12 p.c. There were 7 more convictions for murder than in 1935. Of the 15 specific offences under this class, only 6 show a decrease in convictions, *viz.*, abortion and concealing birth, procuration, bigamy, shooting, stabbing and wounding, assault on females, and aggravated assault.

Offences Against Property with Violence.—An increase of 694 convictions, or nearly 17 p.c., is recorded in this class, although robbery and demanding with menaces showed a decrease.

Offences Against Property without Violence.—The percentage increase in this class was smaller than in the two preceding classes, amounting to slightly over 5 p.c. Improvement was shown in fewer convictions being recorded for bringing stolen goods into Canada, embezzlement, and fraud.

Malicious Offences Against Property.—Convictions in this class increased by 53, or 12 p.c. Those for arson increased from 55 to 82, or nearly half as many again as in 1935.

Forgery and Other Offences against the Currency.—An increase of 184 convictions, or over 20 p.c., was recorded in this class. While offences against the currency decreased, forging and uttering showed a marked increase.

Various Offences.—A slight increase of 264 convictions, or 3 p.c., was recorded in this class. Decreases were recorded in breaches of the Trade Marks Act, criminal negligence, perjury, prison breach, riot, and various offences. Noteworthy among the increases were the convictions for intimidation, which increased from 45 to 122.

Details by offences are given in Table 6 and the details of the disposition of the charges in Table 7, which shows, with other information, that convictions of females numbered 3,370 in 1936 as against 3,336 in 1935 and 3,145 in 1934; as recently as 1924 the figure was only 1,826. Details as to occupation, conjugal condition, educational status, age, use of liquors, birthplace, religion, and residence of those convicted of indictable offences are given in Table 8.

6.—Indictable Offences, by Classes, years ended Sept. 30, 1934-36.

NOTE.—The figures of this table do not include charges or convictions of juvenile delinquents.

Class and Offence.	1934.		1935.		1936.	
	Charges.	Convictions.	Charges.	Convictions.	Charges.	Convictions.
	No.	No.	No.	No.	No.	No.
Class I.—Offences against the Person.						
Murder.....	46	19	46	15	48	22
Murder, attempt to commit.....	24	10	21	13	36	25
Manslaughter.....	100	39	135	41	126	59
Abortion and concealing birth of infants.	59	40	52	37	57	34
Rape and other crimes against decency..	658	423	563	384	671	443
Procuration.....	36	25	77	63	54	37
Bigamy.....	58	48	56	47	46	40
Shooting, stabbing, and wounding.....	127	88	146	113	144	90
Assault on females, incl. assault on wife..	211	183	378	302	327	250
Aggravated assault.....	1,164	821	1,376	940	1,476	929
Assault on police officer.....	536	491	592	515	714	647
Assault and battery.....	1,570	1,159	1,622	1,212	2,044	1,577
Refusal to support family.....	280	147	285	157	319	194
Wife desertion.....	11	7	8	7	14	10
Causing injury by fast driving.....	42	30	32	19	45	28
Various other offences against the person	83	58	185	120	117	72
Totals, Class I.....	5,005	3,588	5,574	3,985	6,238	4,457

6.—Indictable Offences, by Classes, years ended Sept. 30, 1934-36—concluded.

Class and Offence.	1934.		1935.		1936.	
	Charges.	Convictions.	Charges.	Convictions.	Charges.	Convictions.
	No.	No.	No.	No.	No.	No.
Class II.—Offences against Property with Violence.						
Burglary, house-, warehouse-, and shop-breaking.....	4,254	3,848	4,158	3,720	4,982	4,487
Robbery and demanding with menaces..	503	390	527	427	454	354
Totals, Class II.....	4,757	4,238	4,685	4,147	5,436	4,841
Class III.—Offences against Property without Violence.						
Bringing stolen goods into Canada.....	8	6	8	8	3	3
Embezzlement.....	229	164	178	124	180	120
False pretences.....	2,927	2,514	2,972	2,471	3,041	2,618
Feloniously receiving stolen goods.....	1,571	1,142	1,857	1,437	2,258	1,742
Fraud and conspiracy to defraud.....	668	517	627	512	485	395
Horse, cattle, and sheep stealing.....	137	121	175	138	217	181
Theft.....	12,309	10,719	12,175	10,603	12,791	11,026
Theft of mail.....	30	25	30	28	44	43
Theft of automobile.....	731	645	967	840	1,051	894
Totals, Class III.....	18,610	15,853	18,989	16,161	20,070	17,022
Class IV.—Malicious Offences against Property.						
Arson.....	127	91	79	55	131	82
Malicious injury to horses and cattle and other wilful damage to property.....	639	393	489	384	532	410
Totals, Class IV.....	766	484	568	439	663	492
Class V.—Forgery and Other Offences against the Currency.						
Offences against the currency.....	16	12	73	57	43	31
Forgery and uttering forged documents..	726	678	933	853	1,118	1,063
Totals, Class V.....	742	690	1,006	910	1,161	1,094
Class VI.—Other Offences not Included in the Foregoing Classes.						
Breaches of the Trade Marks Act.....	82	75	85	83	41	37
Attempt to commit suicide.....	172	147	192	155	198	163
Carrying unlawful weapons.....	256	233	294	255	320	280
Criminal negligence.....	175	89	215	109	159	88
Conspiracy.....	250	165	210	120	222	143
Indecent exposure and other offences against public morals.....	169	155	170	156	172	160
Intimidation.....	173	107	111	45	180	122
Keeping bawdy houses and inmates thereof.....	1,400	1,327	1,753	1,654	1,747	1,661
Offences against gambling and lottery Acts.....	2,965	2,879	3,788	3,700	3,917	3,747
Offences against Opium and Narcotic Drug Act.....	156	146	154	136	184	149
Offences against revenue laws.....	521	481	435	398	484	453
Illicit stills.....	431	419	263	247	349	335
Perjury and subornation of perjury.....	192	114	176	110	166	97
Prison breach and escape from prison....	201	184	241	234	245	233
Riot and affray.....	179	140	376	294	310	249
Sodomy and bestiality.....	89	75	96	85	159	136
Various other misdemeanours.....	117	95	125	108	120	100
Totals, Class VI.....	7,528	6,831	8,684	7,889	8,973	8,153
Grand Totals.....	37,408	31,684	39,506	33,531	42,541	36,059

7.—Charges, Acquittals, Convictions, and Sentences in respect of Indictable Offences, years ended Sept. 30, 1930-36.

NOTE.—Juvenile delinquencies not included.

Item.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	No.	No.	No.	No.	No.	No.	No.
Charges.....	34,751	38,180	37,621	38,927	37,408	39,506	42,541
Acquittals.....	6,246	6,589	6,206	5,942	5,695	5,934	6,381
Persons detained for lunacy.....	48	58	32	43	29	41	101
Convictions.....	28,457	31,542	31,383	32,942	31,684	33,531	36,059
Males.....	25,797	28,935	28,181	29,465	28,539	30,195	32,689
Females.....	2,660	2,607	3,202	3,477	3,145	3,336	3,370
First convictions.....	21,319	23,474	23,841	24,576	22,805	23,844	24,109
Second convictions.....	3,051	3,159	2,895	3,584	3,219	3,163	3,864
Reiterated convictions.....	4,087	4,909	4,647	4,782	5,660	6,524	8,086
Sentences—							
Option of a fine.....	7,473	8,036	8,143	8,973	8,614	9,374	9,593
Under one year in gaol.....	7,474	8,794	9,307	10,128	10,492	10,631	11,319
One year and over in gaol.....	2,502	2,728	2,760	2,656	2,391	2,357	1,651
Indeterminate.....	115	7	7	4	Nil	Nil	Nil
Two years and under five in penitentiary.....	2,501	2,551	2,347	2,018	1,902	2,191	2,371
Five years and over in penitentiary.....	508	568	536	451	353	462	528
For life in penitentiary.....	4	10	9	15	5	3	6
Death.....	17	25	23	24	19	15	22
Committed to reformatories.....	224	597	376	168	297	467	2,572
Other sentences.....	7,639	8,226	7,875	8,505	7,611	8,031	7,997

8.—Persons Convicted of Indictable Offences, Classified by Occupation, Conjugal Condition, Birthplace, Religion, etc., years ended Sept. 30, 1930-36.

NOTE.—Juvenile delinquencies not included.

Item.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	No.	No.	No.	No.	No.	No.	No.
Occupation—							
Agriculture.....	1,509	1,780	2,026	2,087	2,267	1,935	2,531
Lumbering.....	115	117	101	119	92	85	98
Fishing.....	77	98	128	98	149	124	181
Mining.....	289	188	266	313	263	315	368
Manufacturing and construction.....	3,050	3,274	3,379	3,294	3,127	3,305	3,197
Transportation.....	940	941	804	786	769	827	1,406
Trade.....	3,235	3,672	3,221	3,603	3,991	4,875	6,003
Domestic service.....	3,434	3,467	4,034	4,311	3,436	3,858	3,777
Public service ¹	—	—	—	—	—	—	445
Professional service.....	342	272	204	191	196	179	169
Labouring.....	9,974	11,409	11,072	10,911	10,077	11,773	13,470
Students ¹	—	—	—	—	—	—	647
Unemployed ¹	—	—	—	—	—	—	1,170
Not given.....	5,492	6,324	6,148	7,229	7,317	6,255	2,597
Totals.....	28,457	31,542	31,383	32,942	31,684	33,531	36,059
Conjugal Condition—							
Married.....	9,587	10,141	9,801	10,657	10,731	11,197	12,392
Single.....	15,332	15,003	17,464	17,424	16,074	18,710	20,759
Widowed.....	371	327	525	485	485	515	581
Divorced.....	7	5	12	11	9	7	23
Not given.....	3,160	6,066	3,581	4,365	4,385	3,102	2,304
Educational Status—							
Unable to read or write.....	711	464	595	485	378	569	375
Elementary.....	23,819	26,490	26,247	27,904	26,498	29,756	34,339
Superior.....	482	420	454	407	527	388	575
Not given.....	3,445	4,168	4,087	4,146	4,281	3,018	770

¹ Not reported separately prior to 1936.

8.—Persons Convicted of Indictable Offences, Classified by Occupation, Conjugal Condition, Birthplace, Religion, etc., years ended Sept. 30, 1930-36—concluded.

Item.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	No.	No.	No.	No.	No.	No.	No.
Age—							
16 years and under 21.....	6,453	7,266	6,718	7,050	6,130	6,097	6,875
21 years and under 40.....	14,343	15,810	16,419	19,445	16,496	18,180	19,244
40 years or over.....	4,901	4,871	5,008	5,657	5,667	6,058	6,948
Not given.....	2,760	3,595	3,238	790	3,391	3,196	2,992
Use of Liquors—							
Moderate.....	17,305	17,753	22,498	23,938	22,809	26,827	30,561
Immoderate.....	2,167	2,121	2,749	2,645	2,199	2,528	3,487
Not given.....	8,985	11,668	6,136	6,359	6,676	4,176	2,011
Birthplace—							
England or Wales.....	2,245	2,100	2,098	1,659	1,394	1,503	1,518
Ireland.....	433	394	412	456	382	393	368
Scotland.....	764	943	737	761	643	678	813
Canada.....	17,256	18,297	19,899	21,522	21,176	23,082	26,751
Other British possessions.....	163	169	122	145	273	140	132
United States.....	1,094	990	934	896	781	703	1,116
Other foreign countries.....	3,486	3,508	3,387	3,844	3,556	3,614	3,536
Not given.....	3,016	5,141	3,794	3,659	3,479	3,418	1,825
Religion—							
Baptist.....	710	686	780	705	679	856	837
Roman Catholic.....	9,804	10,141	11,221	12,088	11,271	13,341	15,464
Church of England.....	3,213	3,562	3,118	2,961	2,865	3,024	3,323
Methodist ¹	578	571	442	449	377	346	268
Presbyterian.....	2,387	2,836	2,358	2,277	1,927	1,945	2,004
United Church.....	1,958	2,050	2,321	2,212	2,230	2,356	2,887
Other Protestant.....	3,388	3,695	3,943	4,528	4,447	4,684	4,747
Jewish.....	497	618	687	606	622	807	538
Other denominations.....	2,340	2,793	2,489	2,806	2,373	2,555	3,129
Not given.....	3,582	4,590	4,024	4,310	4,893	3,617	2,862
Residence—							
Cities and towns.....	21,986	24,210	24,547	22,395	24,718	26,203	27,749
Rural districts.....	6,369	6,648	6,490	7,260	6,801	6,952	8,310
Not given.....	102	684	346	3,287	165	376	Nil

¹ Notwithstanding the fact that the United Church of Canada was completely organized in 1926, these persons still reported themselves as Methodists.

Section 3.—Summary Convictions of Adults.

The following statistics relate to “non-indictable” offences committed by adults (persons 16 years of age or over) and disposed of by police magistrates or other justices of the peace, under authority of the Summary Convictions Act. Such convictions numbered 377,706 during the year ended Sept. 30, 1936, an increase of 15,064, or 4.2 p.c., as compared with 1935. With the exceptions of Quebec and the Northwest Territories, increases in the total convictions for non-indictable offences were shown everywhere.

9.—Summary Convictions, by Provinces, years ended Sept. 30, 1911-36.

NOTE.—For figures for 1900-10, see p. 1020 of the 1933 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W.T.	Canada.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1911....	375	5,306	2,766	17,729	34,871	12,366	7,317	9,350	10,380	145	28	100,633
1912....	437	5,920	3,022	24,335	42,104	13,985	9,184	15,254	16,472	163	84	130,960
1913....	443	6,353	3,136	29,714	51,396	16,513	11,711	17,513	17,882	157		154,818
1914....	498	6,613	2,872	30,563	56,874	14,840	11,854	16,806	20,481	196		161,597
1915....	346	5,774	2,833	24,152	49,942	11,266	9,650	12,331	15,993	143		132,430
1916....	405	5,924	2,664	20,767	41,732	7,826	9,287	9,526	6,344	156		104,631
1917....	323	4,700	2,564	22,560	42,655	7,065	6,007	5,726	6,768	84	1	98,452
1918....	209	4,794	1,611	25,374	46,448	7,298	6,536	6,744	6,821	64		105,899
1919....	256	5,533	2,447	30,881	44,587	8,128	6,180	5,961	7,638	32		111,623
1920....	340	5,790	3,405	40,801	55,049	11,093	6,523	7,219	13,996	49		144,265

¹ See footnote 1 to Table 4, p. 1023.

9.—Summary Convictions, by Provinces, years ended Sept. 30, 1911-36—concluded.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W.T.	Canada.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1921....	373	4,639	2,680	45,042	63,874	9,563	6,137	8,571	14,460	37	1	155,376
1922....	309	3,332	2,281	31,441	63,015	9,530	6,876	7,766	11,720	52		136,322
1923....	321	3,033	2,179	27,563	64,639	11,377	8,346	8,359	11,639	37		137,493
1924....	232	3,355	2,499	22,803	73,768	11,189	7,274	8,342	13,508	29		142,999
1925....	235	2,790	2,417	25,364	79,470	10,724	8,020	7,840	14,875	29	61	151,825
1926....	345	3,568	2,418	24,428	90,061	12,913	8,614	8,142	18,337	45	42	169,913
1927....	392	4,362	2,665	28,732	101,345	16,420	8,243	8,801	22,292	54	34	193,240
1928....	662	4,499	3,031	29,302	146,586	19,921	9,108	10,927	21,598	72	57	245,763
1929....	783	6,231	4,032	51,099	153,335	26,536	11,413	13,939	22,499	94	32	290,043
1930....	906	6,299	4,072	60,098	163,913	26,879	11,574	12,904	21,989	86	39	308,759
1931....	838	5,324	4,533	99,381	153,451	22,625	10,691	13,113	17,671	80	71	327,778
1932....	825	3,573	3,841	112,132	131,374	18,218	7,538	8,180	12,148	55	25	297,909
1933....	655	3,922	3,483	117,433	124,589	15,396	6,355	9,698	11,051	68	23	292,673
1934....	733	4,216	3,698	115,313	160,895	16,985	5,680	7,896	13,369	28	31	328,744
1935....	924	4,818	3,968	118,499	190,763	15,685	5,749	8,398	13,759	41	38	362,642
1936....	956	5,593	4,691	111,254	204,744	17,476	5,750	8,810	18,349	58	25	377,706

¹ See footnote 1 to Table 4, p. 1023.

While the marked increase during the past eight or nine years has been due almost entirely to breaches of traffic regulations, which have risen from 78,027 in 1926 to 237,183 in 1936, this group shows a decrease of 8,940 or 3.63 p.c. in 1936 as compared with 1935. This is the first decrease shown in 15 years for breaches of traffic regulations. The bulk of the 1936 total increase over 1935 is accounted for by an extraordinary increase (14,781 convictions, or 57.09 p.c.) in convictions for gambling. Convictions for drunkenness, breaches of liquor Acts, municipal by-laws, and loose, idle, and disorderly conduct show substantial increases, with breaches of traffic regulations and offences against the railways showing the greatest decreases. By sex, the summary convictions were: in 1926, males 159,528, females 10,385; in 1930, males 292,557, females 16,202; in 1931, males 312,111, females 15,667; in 1932, males 281,318, females 16,591; in 1933, males 275,229, females 17,444; in 1934, males 311,542, females 17,202; in 1935, 339,494 males and 23,148 females; and in 1936, 355,772 males and 21,934 females.

10.—Summary Convictions, by Offences, years ended Sept. 30, 1933-36.

Offence.	1933.	1934.	1935.	1936.	Increase or Decrease, 1935-36.
	No.	No.	No.	No.	No.
Assault.....	3,658	3,777	3,690	3,433	-257
Carrying fire-arms and unlawful weapons.	361	280	258	388	+130
Contempt of court.....	26	13	66	116	+50
Cruelty to animals.....	244	305	263	259	-4
Disturbing religious and like meetings....	44	14	19	43	+24
Fishery and game Acts, offences against.	1,755	1,442	1,724	2,149	+425
Gambling Acts, offences against.....	22,191	80,699	25,889	40,670	+14,781
Immigration Act, offences against.....	41	29	24	28	+4
Inspection and Sales Act, offences against	303	423	399	340	-59
Adulteration of food (food and drugs Acts).....	162	202	244	201	-43
Weights and measures Acts, offences against.....	155	181	379	361	-18
Liquor, prohibition and temperance Acts, offences against.....	10,489	10,754	8,826	10,073	+1,247
Malicious or wilful damage to property...	811	729	790	785	-5
Masters and servants Acts, offences against.....	219	205	224	292	+68

10.—Summary Convictions, by Offences, years ended Sept. 30, 1933-36—concluded.

Offence.	1933.	1934.	1935.	1936.	Increase or Decrease, 1935-36.
	No.	No.	No.	No.	No.
Non-payment of wages.....	1,492	1,246	1,540	1,385	-155
Breaches of traffic regulations.....	186,848	217,827	246,123	237,183	-8,940
Breaches of by-laws.....	14,218	15,098	17,646	20,456	+2,810
Non-support of family and neglecting children.....	1,363	1,435	1,415	1,607	+192
Contributing to delinquency of children.	952	939	862	1,033	+171
Opium and Narcotic Drug Act, various offences against.....	59	69	29	32	+3
Profanation of the Lord's Day.....	929	994	869	1,087	+218
Railway Acts, various offences against...	1,663	1,297	1,150	959	-191
Trespass on railway.....	915	565	713	588	-125
Stealing ride on railway.....	2,277	1,076	1,017	524	-493
Revenue laws, offences against.....	1,076	923	2,604	3,345	+741
Trespass.....	844	518	381	505	+124
Vagrancy.....	11,109	6,424	7,966	7,416	-550
Drunkenness.....	18,910	20,764	25,643	28,433	+2,790
Insulting, abusive and profane language...	346	163	180	347	+167
Frequenting bawdy houses.....	3,980	2,618	2,674	2,725	+51
Loose, idle, disorderly conduct and dis- turbng the peace.....	2,613	4,787	5,777	7,515	+1,738
Various other offences.....	2,620	2,948	3,258	3,428	+170
Totals.....	292,673	328,744	362,642	377,706	+15,064

Convictions for Drunkenness.—The number of summary convictions for drunkenness in Canada in 1936 was 28,433, as compared with 38,826 as recently as 1929. Maximum figures were attained in the years 1913 and 1914; during the War there was an appreciable reduction and since the War, while figures have fluctuated, they have not approximated former high levels. Table 11 shows the numbers of convictions by provinces and years from 1911 to 1936. On both a numerical and a percentage basis, increases in convictions for drunkenness were greater in Ontario during 1936 than in any other province.

11.—Convictions for Drunkenness, by Provinces, years ended Sept. 30, 1911-36.

NOTE.—For figures for 1900-10, see p. 1021 of the 1933 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W.T.	Canada.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1911.....	238	3,149	1,944	6,805	11,347	5,832	2,359	4,041	5,594	63	7	41,379
1912.....	309	3,693	2,116	9,863	12,785	6,925	2,462	6,657	8,275	72	14	53,171
1913.....	324	3,955	2,073	12,265	16,236	7,493	2,970	7,283	8,316	60		60,975
1914.....	342	3,999	1,765	12,776	17,703	6,193	2,142	5,710	9,376	61		60,067
1915.....	231	3,436	1,694	8,939	12,553	4,154	1,332	2,802	5,960	60		41,161
1916.....	219	3,614	1,696	7,108	11,728	3,114	1,062	1,809	2,327	53		32,730
1917.....	207	2,546	1,516	6,025	10,945	1,085	770	391	2,372	25		27,882
1918.....	96	2,435	704	6,680	7,932	1,123	434	825	778	19		21,026
1919.....	116	2,879	1,350	7,116	8,498	1,570	618	1,057	1,004	9	1	24,217
1920.....	120	3,140	1,882	11,863	15,021	2,330	919	1,536	2,948	10		39,769
1921.....	144	2,156	1,264	9,944	14,498	1,429	708	1,838	2,379	2		34,362
1922.....	162	1,492	1,088	7,103	10,063	1,623	816	1,608	1,081	12		25,048
1923.....	164	1,392	1,074	6,260	11,370	1,680	884	1,277	1,443	21		25,565
1924.....	94	1,456	1,176	6,146	12,993	1,948	505	1,464	1,545	11		27,338
1925.....	112	1,466	1,171	6,342	11,811	1,948	668	1,374	1,844	9	6	26,751
1926.....	168	1,898	1,234	5,364	13,752	1,871	487	1,413	2,114	6	10	28,317
1927.....	182	2,053	1,397	7,000	14,334	1,883	618	1,182	2,496	26	Nil	31,171
1928.....	263	2,176	1,285	6,362	15,931	1,863	1,014	1,538	2,758	34	Nil	33,224
1929.....	406	3,284	1,814	8,328	17,620	1,830	794	1,810	2,898	42	Nil	38,826
1930.....	393	3,236	1,706	7,649	15,970	1,392	674	1,551	3,183	35	Nil	35,789
1931.....	446	2,137	1,541	7,461	12,404	1,089	466	1,191	2,372	41	Nil	29,148
1932.....	355	1,402	1,142	5,913	10,388	1,023	319	908	1,195	19	Nil	22,664
1933.....	297	1,478	1,127	4,575	8,724	737	286	589	1,068	28	1	18,910
1934.....	401	1,486	1,505	4,776	9,060	826	304	609	1,781	12	4	20,764
1935.....	475	1,933	1,755	4,705	12,386	1,054	379	692	2,230	29	5	25,643
1936.....	558	2,221	2,187	5,332	13,049	1,125	418	785	2,734	21	3	28,433

1 See footnote 1 to Table 4, p. 1023.

Offences against the Liquor Acts.—Until the Great War, alcoholic liquors were generally sold under specified conditions by licensed hotels or licensed shops. Offences against the liquor Acts usually represented a breach of the conditions of sale. During the War, prohibition was generally established but in more recent years the tendency has been for the Provincial Governments to take over the sale of liquor through commissions and derive a revenue therefrom (see pp. 632-635). Eight of the nine provinces now have their liquor commissions, Prince Edward Island being the only province in which prohibition prevails. In these circumstances, the convictions for offences against the liquor Acts in 1929 reached the highest figure on record, *viz.*, 19,327, but have since fallen off to 10,073 in 1936. The numbers of such convictions in each year since 1911 are given by provinces in Table 12.

12.—Convictions for Offences against the Liquor Acts, by Provinces, years ended Sept. 30, 1911-36.

NOTE.—For figures for 1900-10, see p. 1022 of the 1933 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W.T.	Canada.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1911.....	38	592	278	1,032	1,759	46	240	423	318	33	16	4,775
1912.....	36	551	361	859	2,117	85	366	605	625	40	26	5,671
1913.....	26	502	447	791	2,167	166	528	560	741	41		5,969
1914.....	72	660	365	882	2,328	166	404	551	394	49		5,871
1915.....	42	633	390	1,021	2,018	124	378	573	246	27		5,452
1916.....	75	646	352	1,015	2,002	172	967	713	295	11		6,248
1917.....	36	449	312	1,076	2,927	289	774	885	576	15		7,339
1918.....	42	412	288	1,155	3,410	230	422	678	812	23		7,472
1919.....	37	479	387	1,479	3,353	175	434	436	597	6	1	7,383
1920.....	23	394	585	1,975	4,385	380	452	618	1,427	8		10,247
1921.....	44	362	419	1,384	4,938	427	583	907	1,394	2		10,460
1922.....	28	267	366	954	3,246	392	708	1,043	1,503	12		8,519
1923.....	39	264	364	1,724	3,958	542	997	990	1,196	14		10,088
1924.....	29	293	375	1,549	4,678	452	966	817	1,286	4		10,449
1925.....	51	235	319	1,919	5,047	512	1,078	758	1,699	9	9	11,636
1926.....	53	499	393	2,104	6,362	786	1,231	737	1,345	2	Nil	13,512
1927.....	66	610	271	2,025	5,620	627	1,245	814	1,186	13	Nil	12,477
1928.....	69	658	478	2,096	7,812	598	1,174	944	1,350	22	32	15,263
1929.....	81	804	486	3,392	9,034	1,399	1,542	1,017	1,556	8	8	19,327
1930.....	98	532	469	3,043	8,995	1,180	1,392	970	1,432	14	7	18,132
1931.....	52	588	541	2,956	8,044	1,144	1,042	888	907	13	10	16,185
1932.....	50	353	489	2,379	6,057	900	629	557	790	14	8	12,226
1933.....	52	586	559	1,755	5,067	708	553	410	782	13	4	10,459
1934.....	80	750	622	2,325	4,324	826	543	452	820	3	9	10,754
1935.....	79	699	567	1,776	3,225	792	506	472	692	8	10	8,826
1936.....	37	698	610	1,252	4,185	940	570	784	965	24	8	10,073

¹ See footnote 1 to Table 4, p. 1023.

Breaches of Traffic Regulations.—Convictions for breaches of traffic regulations (Table 13), which at the beginning of the century numbered only 185 in all Canada, have, as a result of the growing density and increasing use of motor vehicles, become the largest element in the non-indictable offences. Such convictions reached a record total of 237,183 in 1936, when they represented 63 p.c. of the total of 377,706 (see Table 9) summary convictions. Convictions for breaches of traffic regulations in 1936 showed increases in all provinces with the exceptions of Prince Edward Island and Quebec.

13.—Convictions for Breaches of Traffic Regulations, by Provinces, years ended Sept. 30, 1911-36.

NOTE.—For figures for 1900-10, see p. 1023 of the 1933 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	Canada. ¹
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1911.....	19	86	17	267	3,376	1,116	96	139	661	Nil	5,777
1912.....	8	97	24	1,806	5,928	1,778	215	838	1,768	Nil	12,462
1913.....	9	83	5	3,373	6,697	3,030	248	672	1,883	Nil	16,000
1914.....	7	176	69	2,643	4,717	2,419	410	754	2,051	Nil	13,246
1915.....	6	62	101	1,509	4,494	1,865	204	503	1,804	1	10,549
1916.....	7	228	57	2,146	5,577	1,043	321	380	615	7	10,381
1917.....	13	324	54	1,677	9,854	2,619	441	533	813	10	16,338
1918.....	17	523	80	3,505	12,206	2,700	418	736	995	1	21,181
1919.....	15	509	62	4,971	13,374	3,123	863	701	1,677	1	25,296
1920.....	129	600	49	11,499	19,708	4,987	744	1,673	3,780	1	43,170
1921.....	109	443	87	12,335	26,860	4,995	700	1,845	4,412	2	51,788
1922.....	38	289	315	3,344	31,813	4,968	1,112	1,996	4,101	1	47,977
1923.....	36	397	196	1,746	33,402	6,182	1,246	2,514	4,095	1	49,815
1924.....	49	350	237	3,818	40,530	6,412	1,282	2,301	5,084	Nil	60,063
1925.....	27	200	281	4,976	44,618	5,971	1,375	1,940	4,389	1	63,778
1926.....	64	263	180	5,534	52,727	8,588	1,730	2,059	6,882	Nil	78,027
1927.....	69	402	244	6,418	62,037	10,871	1,610	2,459	12,268	2	96,380
1928.....	223	462	516	6,273	101,356	14,099	2,100	3,481	12,976	2	141,493
1929.....	152	859	887	19,427	105,703	19,460	3,643	5,612	10,592	2	166,337
1930.....	212	831	757	28,633	115,073	20,672	3,727	4,903	10,776	Nil	185,584
1931.....	95	999	1,200	64,611	111,718	16,556	4,259	5,070	7,851	2	212,361
1932.....	174	643	842	70,253	94,188	13,251	2,811	2,755	5,743	Nil	190,660
1933.....	82	628	693	72,464	91,521	11,021	1,859	3,282	5,298	Nil	186,848
1934.....	57	638	523	64,429	128,604	12,725	1,624	2,819	6,403	Nil	217,827
1935.....	101	760	609	69,671	153,142	11,664	1,720	2,669	5,787	Nil	246,123
1936.....	77	1,099	720	46,464	162,951	12,900	1,839	2,817	8,315	1	237,183

¹ No convictions were reported for the Northwest Territories.

For the year 1936, Ontario, which had 48 p.c. of the registrations of motor vehicles in Canada (see p. 672), had 69 p.c. of the total convictions; Quebec in the same year had 15 p.c. of the motor vehicles and 20 p.c. of the convictions; and Manitoba 6.1 p.c. of the motor vehicles and 5.5 p.c. of the convictions. In interpreting the figures in this way, however, it should be pointed out that traffic regulations are by no means uniform throughout Canada and no account is taken of the differences in the degrees of urbanization in the provinces. Thus, the above three provinces contain large centres of population, while in the Maritime Provinces, Saskatchewan, and Alberta, with a lower degree of urbanization, convictions were low in proportion to the number of motor vehicles registered.

Section 4.—Juvenile Delinquency.

Juveniles under 16 years of age to the number of 7,210 were found guilty of various offences in the year ended Sept. 30, 1936, as compared with 7,679 in 1935, and 7,831 in 1926. Of the 1936 total, 4,970 were convicted of major offences and 2,240 of minor offences, terms which correspond very nearly to indictable and non-indictable offences as applied to adults. The offences proven against juveniles in 1935 and 1936 are shown, by province and sex, in Table 14.

14.—Juvenile Delinquents Convicted of Major and Minor Offences, by Provinces and Sex, years ended Sept. 30, 1935 and 1936.

Province.	Major Offences.				Minor Offences.			
	Males.		Females.		Males.		Females.	
	1935.	1936.	1935.	1936.	1935.	1936.	1935.	1936.
	No.	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island.....	30	19	3	1	1	Nil	Nil	Nil
Nova Scotia.....	230	309	10	12	63	82	9	14
New Brunswick.....	241	194	6	10	101	61	7	1
Quebec.....	1,559	1,278	74	46	674	633	177	224
Ontario.....	1,972	1,959	87	62	617	802	77	102
Manitoba.....	396	243	32	32	136	38	18	11
Saskatchewan.....	228	217	11	11	42	8	1	2
Alberta.....	306	296	12	19	61	95	1	6
British Columbia.....	306	259	11	3	158	138	22	23
Canada¹.....	5,268	4,774	246	196	1,853	1,857	312	383

¹ No convictions were reported for the Territories.

Major Offences.—In Table 15 are shown the various major offences for which juvenile delinquents were convicted from 1930 to 1936. It will be observed that theft, house- and shop-breaking with theft, and other wilful damage to property account for the great bulk of the offences; in 1936, 94 p.c. of the major offences were of this character.

15.—Juvenile Delinquents Convicted of Major Offences, by Offences, years ended Sept. 30, 1930-36.

Offence.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	Increase or Decrease for 1936.
	No.	No.	No.	No.	No.	No.	No.	No.
Murder.....	Nil	Nil	Nil	Nil	Nil	Nil	Nil	—
Manslaughter.....	Nil	1	Nil	1	Nil	Nil	1	+ 1
Rape, carnal knowledge and incest.....	5	8	5	8	15	8	10	+ 2
Indecent assault.....	49	42	34	28	24	29	31	+ 2
Aggravated assault and wounding.....	10	52	68	16	36	60	24	+ 36
Common assault.....	101	119	104	139	115	98	102	+ 4
Endangering life on railway.....	31	32	17	50	31	48	30	— 18
Other offences against the person.....	3	2	4	5	6	5	5	Nil
Breaking, entering and theft.....	944	948	914	957	1,071	1,022	1,015	— 7
Robbery.....	7	13	13	15	1	9	4	— 5
Theft and receiving stolen goods.....	3,662	3,139	3,093	3,155	3,094	3,548	3,094	— 454
False pretences and fraud.....	24	11	9	9	20	14	12	— 2
Arson.....	31	39	19	24	28	13	15	+ 2
Other wilful damage to property.....	702	749	676	637	776	599	539	— 60
Forgery and offences against the currency.....	17	10	11	4	11	12	11	— 1
Immorality.....	52	109	85	72	73	35	52	+ 17
Various other offences.....	15	37	44	24	52	14	25	+ 11
Totals.....	5,653	5,311	5,096	5,144	5,353	5,514	4,970	— 544

Minor Offences.—Of the 2,240 juvenile delinquents found guilty of minor offences in 1936, 333 were convicted of breaches of municipal by-laws, 476 of disorderly conduct and disturbing the peace, 530 of disobedience or incorrigibility, 251 of trespass, 277 of truancy, 161 of vagrancy and indecent language and 212 of other minor offences.

Section 5.—Municipal Police Statistics.

Police statistics were collected in 1936 from 161 cities and towns of 4,000 population or over in 1931, aggregating a total of 4,432,750 persons. The total number of police was 5,435, which is an average of one policeman to each 816 persons in the population of those cities and towns.

The returns showed a total of 402,643 crimes known to have been committed; 123,140 arrests were made and 216,617 summonses issued. The prosecutions numbered 340,617 with 287,610 convictions.

Automobiles reported stolen numbered 8,212 during 1936, of which 8,148 or 99.2 p.c. were recovered; 11,976 bicycles were stolen with 6,970 or 58.2 p.c. recovered. The value of other goods reported stolen was \$2,977,212 with \$1,260,558 or 42.3 p.c. recovered. There were 47,237 automobile accidents reported to the police, and 292 deaths and 13,854 injuries resulted from such accidents. Other accidents reported resulted in the death of 629 persons and injuries to 6,552.

16.—Police Statistics of Canadian Cities and Towns, by Provinces, calendar years 1935 and 1936.

Year and Province.	Cities and Towns.	Population.	Police.	Arrests.	Summonses.	Population per Policeman.	Arrests per Policeman.
	No.	No.	No.	No.	No.	No.	No.
1935.							
Prince Edward Island....	1	12,361	9	480	263	1,373	53
Nova Scotia.....	13	176,444	142	4,119	1,678	1,243	29
New Brunswick.....	6	94,005	89	3,561	588	1,056	40
Quebec.....	43	1,435,110	2,065	36,732	33,746	695	18
Ontario.....	69	1,756,865	1,857	31,617	119,191	946	17
Manitoba.....	7	273,012	304	4,411	14,481	898	15
Saskatchewan.....	8	149,015	132	2,130	2,571	1,129	16
Alberta.....	4	186,747	195	3,334	4,718	958	17
British Columbia.....	10	349,191	438	8,896	11,257	797	20
Totals, 1935.....	161	4,432,750	5,231	95,280	188,493	847	18
1936.							
Prince Edward Island....	1	12,361	9	517	180	1,373	57
Nova Scotia.....	13	176,444	149	5,211	1,813	1,184	35
New Brunswick.....	6	94,005	96	3,768	539	979	39
Quebec.....	43	1,435,110	2,230	57,560	50,814	644	26
Ontario.....	69	1,756,865	1,832	34,729	125,907	959	19
Manitoba.....	7	273,012	306	4,757	17,320	892	16
Saskatchewan.....	8	149,015	130	2,344	2,652	1,146	18
Alberta.....	4	186,747	197	3,761	4,565	948	19
British Columbia.....	10	349,191	486	10,493	12,827	719	22
Totals, 1936.....	161	4,432,750	5,435	123,140	216,617	816	23

The Royal Canadian Mounted Police are dealt with in Chapter XXVIII—Miscellaneous Administration—at pp. 1063-1064.

Section 6.—Penitentiary Statistics.

The Penitentiaries Branch of the Department of Justice is charged with the administration of the various penitentiaries of Canada. Seven institutions are included in the system, the two largest of which are at Portsmouth, Ont., and St.-Vincent de Paul, Que., while the other five are at Dorchester, N.B.; Prince Albert, Sask.; Stony Mountain, Man.; New Westminster, B.C.; and Collins Bay, Ont. During the fiscal year ended Mar. 31, 1937, the average daily population of these

institutions was 3,103 and the total net cash outlay for the year was \$2,307,716 or \$2.04 per convict per diem, compared with 3,148 average daily population and \$2,307,739 total net cash outlay or \$2.01 per convict per diem for the year 1936.

The special penitentiary for Doukhobors on Piers island, which was administered under the warden of the penitentiary at New Westminster, was in operation from 1932 to Mar. 28, 1935, when the 39 remaining inmates were transferred to New Westminster. The statistics of this special penal colony are included with those of the regular penitentiaries in the following tables, and the reader is referred to p. 1035 of the 1936 Year Book for details of the Piers Island colony, given by sex, age, race, and conjugal condition.

Female convicts are kept in the penitentiary at Portsmouth, Ont., a suburb of Kingston, where special quarters and staff are maintained for their detention and supervision. Female convicts in custody there on Mar. 31, 1937, numbered 32 compared with 30 in 1936, and 40 in 1935.

Movement of Population of Penal Institutions.—Penal institutions may be classified under four heads: (1) penitentiaries, with slow turnover, since prisoners have long sentences; (2) reformatories for boys and (3) reformatories for girls, also with rather slow turnovers, but more rapid in the case of boys than in that of girls; and (4) common gaols, where the turnover is extremely rapid. If the average population for the year be taken as the average of the inmates at the beginning and at the end of the year, and the number discharged be the turnover, the turnover in 1936 was: in penitentiaries, 61 p.c.; in reformatories for boys, 221 p.c.; in reformatories for girls, 84 p.c.; in gaols, no less than 1,984 p.c. Thus, the average time spent in gaol was about 2.5 weeks. In dealing with these figures it must be borne in mind that the common gaol population changes from day to day, and is partly made up of accused persons awaiting trial who may be liberated to-day or sent to a penitentiary or reformatory to-morrow.

17.—Population of Penal Institutions, 1934-36.

NOTE.—Penitentiary statistics until 1919 were supplied directly by each penitentiary and were for the calendar year. For 1920 and subsequent years they have been supplied by the Superintendent of Penitentiaries and are for the fiscal years ended Mar. 31. For other institutions, the figures are for the years ended Sept. 30.

Year and Institution.	In Custody, Beginning of Year.	Admitted During Year.	Discharged During Year.	In Custody, End of Year.
1934.	No.	No.	No.	No.
Penitentiaries.....	4,587	1,713	2,080	4,220
Reformatories for boys.....	3,132	6,326	6,471	2,987
Reformatories for girls.....	764	515	545	734
Gaols.....	4,174	50,379	50,695	3,958
Totals, 1934.....	12,657	58,933	59,691	11,899
1935.				
Penitentiaries.....	4,220	1,477	2,145	3,552
Reformatories for boys.....	2,987	6,343	6,507	2,823
Reformatories for girls.....	734	573	585	722
Gaols.....	3,958	53,128	53,667	3,419
Totals, 1935.....	11,899	61,521	62,904	10,516
1936.				
Penitentiaries.....	3,552	1,558	2,012	3,098
Reformatories for boys.....	2,823	6,894	6,577	3,140
Reformatories for girls.....	722	487	569	640
Gaols.....	3,419	53,748	53,223	3,944
Totals, 1936.....	10,516	62,687	62,381	10,822

Tables 18-20 give the more important penitentiary statistics as reported by the Superintendent. The number of convicts in penitentiaries was 1,865 in 1910, rose to 2,118 in 1916 and declined to 1,468 in 1918. After demobilization and the depression of 1921, the number of convicts rose to 2,640 in 1922, declined to 2,225 in 1924 and then increased to 4,164 in 1932. The increase was particularly rapid after 1929, amounting to 1,395 or 44 p.c. in three years. The number of convicts in 1936, at 3,098, was lower than in any year since 1929, but, in 1937 there was an increase of 5.4 p.c. The number of paroles, as shown in Table 18, numbered 351 in 1937, as compared with 431 in 1936, 554 in 1935, and 731 in 1934.

Table 19 shows the ages of convicts by groups. In 1937, of the total of 3,264, 9.7 p.c. were under 21 years of age and 46.4 p.c. between 21 and 30 years of age; thus 56.1 p.c. were under 30. In 1914 there were 2,003 convicts of whom 9.3 p.c. were under 20 and 44.4 p.c. between 20 and 30, a total of 53.7 p.c. under 30. In 1923 there were 2,486 convicts and 11.3 p.c. were under 20, 46.6 p.c. between 20 and 30, or 57.9 p.c. under 30 years of age. The average age of convicts appears to be slightly younger since the War, but no definite trend is shown in the past decade, although there is a good deal of variation from year to year. Detailed statistics of the race, nationality by place of birth, conjugal state, sex, and religion of convicts are presented in Table 20.

18.—Movement of Convicts, fiscal years ended Mar. 31, 1930-37.

Schedule.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	No.	No.	No.	No.	No.	No.	No.	No.
In Custody, Beginnings of Years	2,769	3,187	3,714	4,164	4,591¹	4,220	3,552	3,097¹
Received by—								
Forfeiture of parole.....	1	8	8	6	2	11	8	12
Revoked paroles.....	23	19	Nil	3	Nil	4	6	Nil
Recapture.....	1	1	3	1	Nil	Nil	Nil	1
Transfer.....	187	172	145	218	179	241	180	176
Received from gaols, etc.....	1,436	1,699	1,787	2,123	1,532	1,221	1,364	1,332
Totals Received.....	1,648	1,899	1,943	2,351	1,713	1,477	1,558	1,521
Discharged by—								
Death.....	14	12	16	15	21	17	13	17
Escape.....	1	1	3	1	Nil	2 ²	Nil	1
Expiry of sentence.....	559	654	837	1,063	943	1,226	1,263	738
Order of the Court.....	2	1	Nil	4	5	5	2	Nil
Pardon.....	15	26	19	44	74	49	76	34
Parole.....	363	413	379	488	731	554	431	351
Transfer.....	187	170	150	219	228	241	182	178
Deportation.....	77	89	83	88 ²	80	50	45	35
Transfer to provincial gaol and execution.....	2	Nil	Nil	5	Nil	Nil	Nil	Nil
Return to provincial authorities..	10	6	6	1	2	1	Nil	Nil
Totals Discharged.....	1,230	1,372	1,493	1,928	2,084	2,145	2,012	1,354
In Custody, Ends of Years.....	3,187	3,714	4,164	4,587	4,220	3,552	3,098	3,264

¹ This discrepancy between those in custody at the end of the previous fiscal year and the beginning of this year appears in the report of the Superintendent of Penitentiaries.

² From asylum.

³ Includes 1 by extradition.

19.—Ages of Convicts as at Mar. 31, 1930-37.

Age Group.	1930.	1931.	1932.	1933. ¹	1934. ¹	1935.	1936.	1937.
	No.	No.	No.	No.	No.	No.	No.	No.
Under 20 years.....	377	484	527	467	409	325	280	317
From 20 to under 30 years.....	1,460	1,710	1,908	2,052	1,916	1,677	1,471	1,515
From 30 to under 40 years.....	738	842	970	1,027	941	861	740	806
From 40 to under 50 years.....	395	437	487	574	538	433	361	378
From 50 to under 60 years.....	144	173	196	257	214	167	178	174
60 years or over.....	73	68	76	210	202	89	68	74
Totals.....	3,187	3,714	4,164	4,587	4,220	3,552	3,098	3,264

¹ See footnote 1, Table 20, also p. 1034.

20.—Convicts in Penitentiaries, Classified by Race, Birthplace, Religion, etc., as at Mar. 31, 1930-37.

Item.	1930.	1931.	1932.	1933. ¹	1934. ¹	1935.	1936.	1937.
	No.	No.	No.	No.	No.	No.	No.	No.
By Race—								
African.....	60 ²	75 ²	79 ²	66 ²	50 ²	51 ²	45 ²	43 ²
Caucasian.....	2,995	3,499	3,923	4,376	4,068	3,417	2,972	3,130
Indian.....	52	59	81	67	51	48	57	62
Mongolian.....	80	81	81	78	51	36	24	29
By Place of Birth—								
British—								
Canadian.....	2,056	2,441	2,806	2,976	2,803	2,502	2,216	2,401
English or Welsh.....	240	292	309	255	230	215	175	155
Irish.....	31	42	46	42	41	42	32	32
Scottish.....	95	118	118	102	88	79	69	80
Other British.....	33	30	41	33	25	20	22	23
Foreign—								
Austrian or Hungarian.....	94	92	90	86	74	85	73	79
Chinese.....	74	75	72	71	46	31	18	21
Italian.....	60	64	74	73	67	68	62	63
Russian.....	119	95	102	446	392	94	59	71
United States.....	253	274	307	282	232	218	181	194
Other foreign.....	132	191	199	221	222	198	191	145
By Conjugal State—								
Single.....	1,967	2,328	2,636	2,551	2,373	2,165	1,934	2,034
Married.....	1,088	1,240	1,352	1,777	1,647	1,227	1,008	1,039
Widowed.....	123	139	161	203	179	144	130	140
Divorced.....	9	7	15	26	21	16	26	51
By Sex—								
Male.....	3,149	3,670	4,116	4,261	3,907	3,512	3,068	3,232
Female.....	38	44	48	326	313	40	30	32
By Social Habits—								
Abstainers.....	611	872	1,076	1,682	1,560	999	884	873
Temperate.....	2,033	2,338	2,639	2,544	2,311	2,191	1,898	2,037
Intemperate.....	543	504	449	361	349	362	316	354
By Religion—								
Anglican.....	546	618	678	603	547	488	447	471
Baptist.....	158	169	173	168	169	172	136	129
Buddhist.....	62	68	61	58	34	19	4	2
Doukhorob.....	Nil	Nil	Nil	593	542	46	2	8
Greek Catholic.....	54	69	54	54	51	50	57	63
Jewish.....	62	66	89	80	83	72	53	55
Lutheran.....	74	83	97	96	90	75	66	87
Methodist.....	—	—	96 ³	82 ³	73 ³	58 ³	42 ³	34 ³
Presbyterian.....	318	407	458	437	403	398	293	270
Roman Catholic.....	1,561	1,810	2,070	2,008	1,842	1,800	1,646	1,658
United Church.....	273	329	257	257	244	264	259	338
Others.....	79	95	131	151	142	110	93	149
Totals.....	3,187	3,714	4,164	4,587	4,220	3,552	3,098	3,264

¹ The unusually high figures for many items and the totals in 1933 and 1934 are due to the confinement of Doukhorobors in the special penitentiary on Piers Island, B.C. See p. 1034. ² All 'coloured'.

³ These persons returned themselves as Methodists in spite of the union with Presbyterians and Congregationalists to form the United Church of Canada in 1925.

CHAPTER XXVIII.—MISCELLANEOUS ADMINISTRATION.

Section 1.—Public Lands.

Table 1, summarizes the land area of Canada by tenure. Items 3, 4, and 5 are obtained from Dominion Government sources and Items 1, 2, and 7 from Provincial Government sources. In the majority of cases the area of provincial lands (Item 6), as calculated by balancing the figures, agrees with the area as estimated by the provincial Departments concerned. Thus, any differences reported from year to year in the area of lands alienated or in process of alienation are compensated for by the adjustment of lands still remaining under the Crown in the right of the provinces concerned. The total land areas shown are the equivalents in thousands of acres of those given by provinces in square miles on p. 7 and pp. 60-61.

1.—Summary of Classification of Lands in Canada, by Tenure (circa 1937).

NOTE.—The land area of Canada is shown classified by surface resources on p. 60.

Tenure.	P.E.I.	N.S.	N.B.	Que.	Ont.
	'000 acres.	'000 acres.	'000 acres.	'000 acres.	'000 acres.
1. Alienated, patented, granted, etc. ¹	1,391	11,026	10,494	24,686	25,819
2. In process of alienation.....	Nil	—	300	4,997	—
3. Dominion lands other than National Parks and Indian Reserves.....	Nil	8	2	18	103
4. Dominion National Parks.....	5	293	Nil	Nil	7
5. Indian Reserves.....	2	20	38	194	1,021
6. Provincial lands, including leased lands and forest reserves, but not provincial parks.....	Nil	1,928	6,749	302,330	202,421
7. Provincial parks.....	Nil	Nil	Nil	2,837	3,129
Totals, Land Area².....	1,398	13,275	17,583	335,062	232,500

Tenure.	Man.	Sask.	Alta.	B.C.	Yukon and N.W.T.	Total for Canada.
	'000 acres.	'000 acres.	'000 acres.	'000 acres.	'000 acres.	'000 acres.
1. Alienated, patented, granted, etc. ¹	28,001	64,307	50,535	15,368	5	231,632
2. In process of alienation.....	143	2,470	229	5,254	Nil	13,393 ³
3. Dominion lands other than National Parks and Indian Reserves.....	2	30	66	103	934,354 ⁴	934,686
4. Dominion National Parks.....	735	1,196	13,436 ⁵	1,098	2,320 ⁶	19,090
5. Indian Reserves.....	484	1,335	1,280	795	1	5,170
6. Provincial lands, including leased lands and forest reserves, but not provincial parks.....	111,258	82,616	93,684	202,118	Nil	1,003,104
7. Provincial parks.....	Nil	350	2	5,203	Nil	11,521
Totals, Land Area².....	140,623	152,304	159,232	229,939	936,680	2,218,596

¹ This item includes lands in process of alienation where such are not reported under Item 2.

² Estimated by the Hydrographic and Map Service, Department of Mines and Resources.

³ For the provinces indicated only.

⁴ In Yukon and N.W.T. areas aggregating 380,542,080 acres have been set apart by Order in Council as game preserves and sanctuaries in which only native Indians and Eskimos may hunt, but have not been permanently dedicated to this purpose by Parliament and are not, therefore, regarded as parks.

⁵ Including the Wood-Buffalo Park (which, though reserved by the Dominion, is not administered as a National Park) and the Tar Sands Reserve.

⁶ That portion of the Wood-Buffalo Park in the Northwest Territories.

Subsection 1.—Dominion Public Lands.*

As stated on p. 1019 of the 1931 Year Book, the lands and other natural resources lying within the boundaries of the provinces of Manitoba, Saskatchewan, Alberta, and British Columbia, which had formerly been administered by the Dominion Government, were transferred in 1930 to the administration of the provinces concerned.

The public lands remaining under the administration of the Dominion Government now comprise lands in the Northwest Territories, including the Arctic archipelago and the islands in Hudson strait and bay; lands in Yukon Territory; National Parks (see pp. 61-64) and historic sites; Indian reserves (see p. 1050); Ordnance and Admiralty lands; and, in general, all lands held by the several departments of the Dominion Government for various purposes connected with Dominion administration.

The great bulk of the land areas under Dominion administration are those of the Yukon and Northwest Territories, amounting to about 936,680,000 acres or 42 p.c. of the land surface of Canada. In general the southern border of both the Yukon and Northwest Territories is 60° N. latitude. In Europe, Oslo, Stockholm, and Leningrad are near this line, and about three-fourths of Norway, two-thirds of Sweden, all of Finland and a large proportion of Russia are north of it. This northern part of the national domain is under the administration of the Lands, Parks, and Forests Branch of the Department of Mines and Resources. The Royal Canadian Mounted Police maintain law and order throughout the Yukon and Northwest Territories. More detailed particulars of the administration of each territory follow:—

The Northwest Territories.—The government of the Northwest Territories is vested in a Commissioner, a Deputy Commissioner, and a Council of five members appointed by the Governor General in Council, with Ottawa as the seat of government. The Territories are subdivided for administrative purposes into the provisional districts of Mackenzie, Keewatin, and Franklin. The District of Mackenzie is the most widely known and developed, trading posts and settlements being located all along the great stretch of inland waterways known as the Mackenzie system.

The administrative headquarters for the Mackenzie District is located at Fort Smith on the Slave river, immediately north of the Alberta provincial boundary. From this point there is uninterrupted navigation to the Arctic ocean, a distance of 1,300 miles, and along the Arctic coast as far east as King William island. When navigation conditions are favourable it is possible to effect inter-communication between the Western and Eastern Arctic through Bellot strait which separates Boothia peninsula, the most northerly tip of the Canadian mainland, from Somerset island.

The Administration provides for a medical and nursing service, assists the Anglican and Roman Catholic missions in providing educational and hospital facilities, and cares for the general welfare of the population of the Territories. The population of the Territories at the time of the 1931 Census was 9,723.

Areas totalling approximately 584,000 square miles comprising many of the finest hunting grounds of the natives have been set aside as preserves wherein only resident Indians, Eskimos, and half-breeds may hunt and trap game. With a view

* Prepared under the direction of R. A. Gibson, Director, Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa.

to conserving the game in the districts not included in the game preserves, licences to hunt and trap game may, under the regulations, be issued only to:—

1. Residents of the Northwest Territories as defined by these regulations who at the present time hold hunting and trapping licences and who continue to reside in the Northwest Territories.

2. The children of those who have had their domicile in the Northwest Territories for the past four years, provided such children continue to reside in the Northwest Territories.

The Wood-Buffalo Park in the vicinity of Fort Smith, which covers an area of 17,300 square miles (a portion of which is in Alberta), has been reserved specially for the protection of buffalo. The Thelon Game Sanctuary to the east of Great Slave lake, which was set aside primarily to aid in the conservation of musk-oxen, provides sanctuary for all species of game. Under the Northwest Game Act, musk-oxen may not be killed anywhere in the Northwest Territories.

In order to augment the supply of wild life available as a source of food and clothing for the natives, the Dominion Government, in 1935, established a herd of Alaskan reindeer on a reserve of approximately 6,600 square miles, immediately east of the Mackenzie delta. The herd has increased in numbers and is contributing to the well-being of the native population, certain of whom are being trained in the handling of the deer.

In view of the great increase in the use of aircraft for mail and general transportation, the Administration is undertaking the development of landing facilities throughout the Mackenzie District. A winter landing field has been provided at Fort Smith and others are in course of completion at Resolution, Providence, Simpson, and Norman. Floating docks, etc., have been constructed at several points for the use of seaplanes.

An excellent air-mail service is provided by the Post Office Department, while the Department of National Defence operates a system of radio stations linking up the chief settlements and mining centres of the Northwest Territories and the Yukon Territory with Edmonton, Alberta. Radio stations are in operation at Fort Smith, Resolution, Simpson, Norman, Aklavik, Tuktoyaktuk (seasonal), Herschel Island (seasonal), Port Radium, Rae, Yellowknife, Dawson, Mayo, Whitehorse, and Burwash Landing. Direction-finding and meteorological stations are operated by the Department of Transport at Chesterfield, Nottingham Island, Resolution Island, and Coppermine.

Exploratory work has been carried on throughout the Territories and much aerial surveying has been done particularly in the mineralized areas of Mackenzie District. Mineral prospectors are exploring new areas, the aeroplane being used as the chief means of transportation. The Precambrian Shield, which has proved so rich in valuable minerals in southerly Canada, is continued into the Territories—that portion lying between Great Slave and Great Bear lakes and Hudson bay—and valuable discoveries have been made in this area. The rich native silver and high-grade pitchblende ores discovered, during the past few years, near Great Bear lake are now under development. The oil wells near Norman on Mackenzie river have been in active operation since 1932, the bulk of the oil produced being used by mining interests operating at the eastern end of Great Bear lake. In recent years much prospecting has been carried out in the Great Slave Lake area where

discoveries of gold have been reported. Active development is now in progress at many points. The agricultural land of the Territories lies almost entirely in the extension of the central plain along the Mackenzie valley.

It is known that there are many possible water-power sites throughout the Territories and certain of them may be developed as a consequence of mining enterprises. Much of the Mackenzie valley carries a forest cover, which furnishes timber and fuel for local needs. Fishing, agriculture, and lumbering are engaged in to some extent, but the principal industry of the Territories is still the taking and exportation of furs, with mining rapidly increasing in importance. Many trading posts operate throughout the regions tributary to the Arctic coast, Hudson bay, and the great inland systems of waterways.

Yukon.—Yukon was created a separate Territory in June, 1898. Provision is made for a local Government composed of a chief executive classified as Controller, also an Elective Legislative Council with jurisdiction over local matters and composed of three members with a three-year tenure of office. The Controller administers the Government under instructions from the Governor General in Council or the Minister of Mines and Resources. The seat of government is at Dawson. The Territory has hospitals, schools, and other amenities of modern life, including wireless and telegraphic facilities. The population in 1931 was 4,230.

The usual route followed by travellers to Yukon Territory is by steamer from ports on the Pacific coast to Skagway, Alaska, from that point to Whitehorse by the White Pass and Yukon railway, and thence by river boat to Dawson.

The use of aircraft for transportation purposes is increasing and landing fields have been conditioned at Dawson, Mayo, Whitehorse, and Carcross. A temporary licence has been issued for the field at Whitehorse which is becoming important through its being on the main route for international traffic. Some work has been done on emergency fields at Selkirk, Carmacks, and McQuesten.

Yukon has produced over \$200,000,000 worth of gold since the Klondike rush, but the old placer claims, operated with cradle, pick, and shovel, have given place to consolidated holdings worked with hydraulic dredges and other modern machinery. The development of the silver-lead ores of the Mayo district has been one of the major factors in the growth of lode-mining enterprises. Copper, tungsten, and coal are also found in the Yukon Territory. There is a hydro-electric installation of 13,200 h.p. in Yukon, which is used to supply electric energy for placer-mining operations and for the city of Dawson.

Although fishing, agriculture (including fur-farming), and some lumbering are carried on as auxiliary industries, the future of Yukon is inevitably bound up with mining development and the fur trade.

Subsection 2.—Provincial Public Lands.

In the Maritime Provinces, in Quebec, Ontario, and British Columbia (except the Railway Belt and the Peace River Block) the public lands have been administered by the Provincial Governments since Confederation. Owing to the transfer of the natural resources to the Prairie Provinces and British Columbia, as outlined

in Chapter XXVII, p. 1019 of the 1931 Year Book, public lands in all provinces are now under provincial administration. In Prince Edward Island, all the land is alienated and there are no provincial public lands.

Those interested in securing information regarding provincial public lands are referred to the following officials of the respective provinces: Minister of Lands and Forests, Halifax, N.S.; Deputy Minister of Lands and Mines, Fredericton, N.B.; Deputy Minister of Lands and Forests, Quebec, Que.; Deputy Minister of Lands and Forests, Toronto, Ont.; Director of Lands, Department of Mines and Natural Resources, Winnipeg, Man.; Director of Lands, Department of Natural Resources, Regina, Sask.; Director of Lands, Department of Lands and Mines, Edmonton, Alta.; Deputy Minister of Lands, Victoria, B.C.

Section 2.—National Defence.

Before the outbreak of the Great War, the Canadian Militia consisted of a Permanent Force, which on Mar. 31, 1914, numbered 3,000 officers, non-commissioned officers, and men, and an Active Militia, which at the same date numbered 5,615 officers and 68,991 non-commissioned officers and men. After the outbreak of war on Aug. 4, 1914, successive contingents of troops of all arms were recruited, equipped, trained, and dispatched by the Dominion Government to England for active service. When hostilities ceased on Nov. 11, 1918, there had been sent overseas, for active service in the Canadian Expeditionary Force, about 418,000 officers, non-commissioned officers, and men.* In addition to these, several thousand Canadians served with the Royal Air Force.

Organization.—Prior to 1922, three departments of the Canadian Government were concerned with the defence of Canada, *viz.*, the Department of Militia and Defence, the Department of the Naval Service, and the Air Board.

During the session of 1922, the National Defence Act was passed, consolidating the Department of Militia and Defence, the Department of the Naval Service, and the Air Board into the Department of National Defence. This Act became effective by proclamation on Jan. 1, 1923. Under it, there is a Minister of National Defence and a Deputy Minister of National Defence. To advise the Minister, a Defence Council has been constituted by Order in Council, consisting of a President (the Minister), a Vice-President (the Deputy Minister), and the following members: the Chief of the General Staff, the Chief of the Naval Staff, and the Senior Air Officer, Royal Canadian Air Force. The Adjutant-General, the Quartermaster-General, the Master-General of the Ordnance, and the Judge Advocate-General, are associate members. There is also a Secretary of the Council.

Subsection 1.—The Naval Service.

The Naval Service of Canada was established by the Naval Service Act, 1910 (9-10 Edw. VII, c. 43), the main provisions of which were described in the 1910 Year Book, pp. xxvi-xxix.

* For the detailed expenditures of the Dominion Government on account of war appropriations in the fiscal years 1915-21, see the Canada Year Book, 1921, p. 798.

The Royal Canadian Navy and its Reserve Forces are under the direction of the Chief of the Naval Staff, who is a member of the Defence Council. The Service consists of:—

1. Royal Canadian Navy (permanent).
2. Royal Canadian Naval Reserve (non-permanent).
3. Royal Canadian Naval Volunteer Reserve (non-permanent).

Administrative and operational staff for all three Forces is provided from the Royal Canadian Navy.

The Royal Canadian Navy.—The Royal Canadian Navy has an authorized complement of 137 officers and 1,582 ratings. A large majority of the men of the R.C.N. are serving under 7-year engagements. A small proportion consists of specialist gunnery, torpedo, and engine-room ratings, lent from the Royal Navy. (On Dec. 31, 1937, there were 3 Royal Navy officers and 8 Royal Navy ratings on loan to the Royal Canadian Navy.)

A proportion of the officers of the Royal Canadian Navy serve periodically in ships of the Royal Navy, to acquire experience in capital ships, cruisers, etc., and training courses are arranged for selected officers at the instructional schools of the Royal Navy to qualify in war staff, gunnery, torpedo, wireless, and other duties. Courses for selected men in the gunnery, torpedo, wireless telegraphy, and mechanical training schools of the Royal Navy are similarly arranged.

The ships of the Royal Canadian Navy are:—

- H.M.C.S. *Saguenay* (destroyer—in commission).
- H.M.C.S. *Skeena* (destroyer—in commission).
- H.M.C.S. *St. Laurent* (destroyer—in commission).
- H.M.C.S. *Fraser* (destroyer—in commission).
- H.M.C.S. *Armentières* (minesweeper—in commission).
- H.M.C.S. *Venture* (training schooner—in commission).

Four new minesweepers are under construction. These ships will be completed and commissioned under the names of H.M.C. Ships *Gaspé*, *Fundy*, *Nootka*, and *Comox*.

Naval training establishments comprising: naval barracks; gunnery drill sheds, with all modern appliances for teaching gun-laying, sight-setting, etc.; torpedo and electrical schools; parade grounds, and other equipment are maintained at Halifax and Esquimalt. Naval dockyards, with workshops, etc., for refitting and supplying necessary stores to H.M.C. ships, are also maintained at Halifax and Esquimalt.

Royal Canadian Naval Reserve.—The establishment of the Royal Canadian Naval Reserve is 70 officers and 430 men recruited from among sea-faring personnel. Officers have been appointed to act as registrars at Halifax, Charlottetown, Quebec, Montreal, and Vancouver.

Officers and men of the Royal Canadian Naval Reserve attend naval training at Halifax and Esquimalt for 42 days for the first year of enrolment and for 14 days annually or biennially thereafter. They are permitted to volunteer for service afloat up to a maximum of six months during each period of enrolment. The period of enrolment in the Royal Canadian Naval Reserve is five years.

Royal Canadian Naval Volunteer Reserve.—The establishment of the Royal Canadian Naval Volunteer Reserve is 87 List "A" officers, 20 List "B" officers, 19 instructors, and 1,096 ratings, distributed as follows: Halifax, Saint John, Charlottetown, Quebec, Montreal, Ottawa, Toronto, Hamilton, Port Arthur, Winnipeg, Saskatoon, Regina, Edmonton, Calgary, Vancouver, Prince Rupert. An additional Division is in process of establishment.

Each Division is under the immediate command of an officer of the R.C.N.V.R., appointed as commanding officer. The commanding officer is assisted by other commissioned officers of the Force.

A petty officer instructor (a highly qualified ex-petty officer of the Royal Navy or of the Royal Canadian Navy) is employed at each Division to give instruction to men of the Division in gunnery, torpedo practice, seamanship, and other naval subjects.

Each List "A" officer and man of the R.C.N.V.R. performs annually a minimum of 30 drills, of a duration of not less than one hour each, at Division headquarters. In actual practice 40 to 50 drills have been performed annually by each member of the R.C.N.V.R. Officers and men also attend from two to three weeks naval training annually at the naval bases at Halifax or Esquimalt, or at sea in H.M.C. or H.M. ships.

Officers and men who can obtain the necessary leave of absence are permitted to perform a maximum of four months voluntary service during each period of enrolment, and a large number have availed themselves of this opportunity of gaining extended naval experience under sea-going conditions. The period of enrolment and of re-enrolment in the R.C.N.V.R. is three years.

Subsection 2.—Military Forces.

The Militia of Canada is constituted by the Militia Act. The Active Militia is divided into the Permanent and the Non-Permanent Militia.

Permanent Active Militia.—The Permanent Force consists of the following units:—

CAVALRY.—The Royal Canadian Dragoons; Lord Strathcona's Horse (Royal Canadians).

ARTILLERY.—The Royal Canadian Horse Artillery Brigade ("A", "B" and "C" Batteries); Royal Canadian Artillery (Nos. 1, 2 and 5 Heavy Batteries, No. 3 Medium Battery and No. 4 Anti-Aircraft Battery).

ENGINEERS.—Royal Canadian Engineers (13 detachments and 1 field company).

SIGNALS.—The Royal Canadian Corps of Signals.

INFANTRY.—The Royal Canadian Regiment; Princess Patricia's Canadian Light Infantry; The Royal 22^d Regiment (a French-Canadian regiment).

ARMY SERVICE CORPS.—The Royal Canadian Army Service Corps (12 detachments and 1 depot).

MEDICAL CORPS.—The Royal Canadian Army Medical Corps (12 detachments).

VETERINARY CORPS.—The Royal Canadian Army Veterinary Corps (5 detachments).

ORDNANCE CORPS.—The Royal Canadian Ordnance Corps (12 detachments).

PAY CORPS.—The Royal Canadian Army Pay Corps (13 detachments).

MILITARY CLERKS.—The Corps of Military Staff Clerks (12 detachments).

The strength of the Permanent Active Militia is limited by the Amending Act of 1919 to 10,000, but at present the limited establishment is less than 4,300.

Schools of Instruction.—The Canadian Small Arms School is the only school which is an independent unit of the Permanent Force, but at all stations of the Permanent Force in Canada Royal Schools of Instruction are conducted.

Non-Permanent Active Militia.—The Non-Permanent Active Militia consists of:—

CAVALRY.—

- 20 Regiments of Cavalry,
Cavalry (Armoured Car), and
Cavalry (Mechanized).

ARTILLERY.—

- 108 Field Batteries.
- 21 Medium Batteries.
- 9 Heavy Batteries.
- 4 Anti-Aircraft Batteries.
- 1 Light Anti-Aircraft Battery.
- 1 Survey Company.

ENGINEERS.—

- 1 Field Squadron.
- 17 Field Companies.
- 6 Field Park Companies.
- 9 Army Troops Companies.
- 1 Electrical and Mechanical Company.
- 1 Workshop and Park Company.
- 2 Anti-Aircraft Companies.
- 2 Corps Field Survey Companies.
- 2 Fortress Companies.

SIGNALS.—

- 7 Cavalry Signal Troops.
- 2 Armoured Car Regiment Signal Troops.
- 4 Divisional Signals.
- 7 District Signals.
- 2 Corps Signals.
- 10 Cable, Wireless, etc., Sections.
- 2 Fortress Signal Companies.

CANADIAN OFFICERS TRAINING CORPS.—

- 22 Contingents.

INFANTRY.—

- 59 Battalions (rifle).
- 26 Battalions (machine-gun).
- 6 Battalions (tank).

ARMY SERVICE CORPS.—

- 1 Cavalry Divisional R.C.A.S.C.
- 6 Divisional R.C.A.S.C.
- 2 Corps Troops R.C.A.S.C.
- 2 Corps Ammunition Parks.
- 2 Pontoon Bridge Parks.
- 1 Reserve Mechanical Transport Company.
- 1 Advance Horse Transport Depot.
- 2 Railroad Supply Detachments.
- 1 Mechanical Transport Vehicle Reception Depot.
- 2 Composite Companies.

MEDICAL CORPS.—

- 2 Cavalry Field Ambulances.
- 22 Field Ambulances.
- 1 Cavalry Field Hygiene Section.
- 11 Field Hygiene Sections.
- 6 Casualty Clearing Stations.

DENTAL CORPS.—

- General List.

VETERINARY CORPS.—

- 1 Veterinary Hospital.
- 2 Cavalry Mobile Veterinary Sections.
- 7 Mobile Veterinary Sections.
- 1 Veterinary Evacuating Station.

ORDNANCE CORPS.—

- 6 Army Field Workshops.
- 1 Ordnance Workshop Company.
- 1 Ordnance Store Company.
- 1 Anti-Aircraft Group Workshop.
- 1 Ordnance Ammunition Company.
- 1 Cavalry Divisional Ordnance Workshop.
- 11 District Store Sections.

POSTAL CORPS.—

- 1 Base Post Office.
- 11 Postal Units.

The total establishment of the Non-Permanent Militia is 7,006 officers and 79,551 other ranks, a total of 86,557, distributed as shown in the following table.

2.—Permanent and Non-Permanent Active Militia in Canada, 1937.

Arm of Service.	Permanent Active Militia.		Non-Permanent Active Militia.	
	Personnel.	Horses.	Personnel.	Horses.
Staff and General List.....	65	Nil	Nil	Nil
Cavalry.....	446	329	7,319	4,690
Field Batteries of Artillery.....	401	17	11,639	Nil
Medium Batteries of Artillery.....	56	Nil	2,224	Nil
Heavy Batteries of Artillery and Anti-Aircraft.....	300	2	1,792	Nil
Engineers.....	286	Nil	4,609	66
Signals.....	416	Nil	4,297	1,169
Officers' Training Corps.....	Nil	Nil	4,777	Nil
Infantry.....	1,005	31	42,305	57
Army Service Corps.....	285	Nil	1,521	4
Non-Combatants.....	974	Nil	6,074	50
Totals.....	4,234	379	86,557	6,036

Reserve Militia.—In addition to the Active Militia, there is also the Reserve Militia—a framework designed to serve as a basis for contingent military organization. Drill and training are voluntary and entail no expense to the public.

The reserves of the Active Militia, as distinguished from the Reserve Militia mentioned above, comprise:—

- (a) The Reserve of Officers (general list).
- (b) Reserve Regimental Depots.
- (c) Corps Reserves and Corps Reserve Lists of the Non-Permanent Active Militia consisting of qualified officers who are permitted to withdraw from the training establishment of Corps of the Non-Permanent Active Militia.
- (d) Certain Reserve units of the R.C.A.M.C. (N.P.)—"General Hospitals" and "Motor Ambulance Convoys".

Military Districts.—For the command, training, and administration of the Canadian Militia, Canada is divided into 11 military districts, each under a District Officer Commanding, assisted by a district staff.

Militia Appropriations.—The Militia appropriations for the six fiscal years ended Mar. 31, 1934-39, are shown in Table 3.

3.—Money Voted by Parliament for the Militia, fiscal years ended Mar. 31, 1934-39.

Item.	1934.	1935.	1936.	1937.	1938.	1939.
	\$	\$	\$	\$	\$	\$
Administration.....	321,000	318,000	359,000	1	1	1
Cadet Services.....	300,000	150,000	150,000	150,000	140,000	139,500
Contingencies.....	35,000	31,500	31,500	28,800	28,800	1
Engineer Service and Works.	297,500	297,500	700,150	949,100	3,657,450	2,483,500
General Stores.....	667,800	837,800	1,451,083	2,551,200	6,060,699	3,854,437
Non-Permanent Active Militia.....	1,994,000	1,994,000	2,401,603	2,358,100	2,578,740	2,830,488
Permanent Force.....	4,910,034	4,910,034	5,230,147	5,613,326	5,848,039	6,087,760
Royal Military College.....	358,150	344,030	359,500	368,400	377,200	381,500
Grants to Associations.....	—	—	—	—	—	103,450 ¹
Totals.....	8,883,484	8,882,864	10,682,983	12,018,926	18,690,928	15,880,635
Civil Government ³	476,378	451,738	478,033	463,925	465,347	1
Grand Totals.....	9,359,862	9,334,602	11,161,016	12,482,851	19,156,275	15,880,635

¹ Discontinued as a separate vote. ment of National Defence.

² Not shown separately in previous years.

³ Depart-

Subsection 3.—Air Force.

The Royal Canadian Air Force is comprised of the Permanent Active Air Force, the Non-Permanent Active Air Force, and a Reserve of Officers. The Royal Canadian Air Force administers and controls all military air operations and certain air operations for civil government departments. The duties of the Royal Canadian Air Force are as follows:—

- (a) To organize, train, and maintain an air force for the defence of Canada.
- (b) The conduct of limited flying operations (chiefly photography) for civil government departments.

Permanent Active Air Force Stations and units are located as follows:—

Location.	Duty.
R.C.A.F. Headquarters, Ottawa, Ont.	
No. 1 Aircraft Depot, R.C.A.F., Ottawa, Ont.	Stores and repair.
No. 2 Equipment Depot, R.C.A.F., Winnipeg, Man.	Stores.
R.C.A.F. Station Headquarters, Ottawa, Ont.	Test and experimental work and civil government air operations.
R.C.A.F. Photographic Establishment.	
No. 2 (Army Co-operation) Squadron.	
No. 3 (Bomber) Squadron.	
No. 7 (General Purpose) Squadron.	
No. 8 (General Purpose) Squadron.	
R.C.A.F. Training Group:	
R.C.A.F. Station Headquarters, Camp Borden, Ont.	Training.
No. 2 Technical Training School.	
R.C.A.F. Station Headquarters, Trenton, Ont.	
No. 1 Technical Training School.	
School of Army Co-operation.	
Flying Training School.	
Air Armament School.	
Air Navigation and Seaplane School.	
Wireless School.	
Equipment Training School.	
Administered by Station Headquarters, Trenton, Ont.	
No. 1 (Fighter) Squadron.	
No. 6 (Torpedo Bomber) Squadron.	
No. 5 (General Reconnaissance) Squadron, Dartmouth, N.S.	
Western Air Command Headquarters, Vancouver, B.C.	Service duties according to type of unit.
R.C.A.F. Station Headquarters, Vancouver, B.C.	
No. 4 (General Reconnaissance) Squadron.	
No. 3 Repair Depot, R.C.A.F.	
No. 111 P. F. Detachment, Vancouver, B.C.	
No. 113 P. F. Detachment, Calgary, Alta.	
No. 11 (Technical) Detachment, Montreal, Que.	
No. 12 (Technical) Detachment, Hamilton, Ont.	
No. 110 P. F. Detachment, Toronto, Ont.	
No. 112 P. F. Detachment, Winnipeg, Man.	
No. 115 P. F. Detachment, Montreal, Que.	
No. 118 P. F. Detachment, Montreal, Que.	
No. 119 P. F. Detachment, Hamilton, Ont.	
No. 120 P. F. Detachment, Regina, Sask.	
No. 121 P. F. Detachment, Quebec, Que.	

Non-Permanent Active Air Force units are located as follows:—

No. 110 (City of Toronto) (Army Co-operation) Squadron, Toronto, Ont.
No. 111 (Coast Artillery Co-operation) Squadron, Vancouver, B. C. (Under Western Air Command Headquarters).
No. 112 (Army Co-operation) Squadron, Winnipeg, Man.
No. 113 (Fighter) Squadron, Calgary, Alta. (now in process of organization—Under Western Air Command Headquarters).
No. 115 (Fighter) Squadron, Montreal, Que.
No. 118 (Bomber) Squadron, Montreal, Que.
No. 119 (Bomber) Squadron, Hamilton, Ont.
No. 120 (Bomber) Squadron, Regina, Sask.
No. 121 (Fighter) Squadron, Quebec, Que. (now in process of organization).

The strength of the Royal Canadian Air Force on Mar. 31, 1938, was:—

	Officers.	Airmen.
Permanent Active Air Force.	183	1,523
Non-Permanent Active Air Force.	80	729
Reserve of Officers.	151	—

Subsection 4.—The Royal Military College.

The Royal Military College of Canada was founded in 1876 by the Honourable Alexander Mackenzie, then Prime Minister of Canada. Since its foundation, 2,616 gentlemen cadets have been enrolled, and of this number 200 are now in attendance.

The maximum number of cadets who may be in residence at any one time is restricted by Order in Council to 200.

The Royal Military College has a very distinguished record in connection with the War. Of the 914 graduates and ex-cadets who served, 353 were granted commissions direct from the College, and 43 enlisted with a view to obtaining commissions; 156 ex-cadets were reported as killed in action, died of wounds, or missing. Ex-cadets of the College won the following honours and decorations: 1 Victoria Cross, 106 Distinguished Service Orders, 109 Military Crosses, 2 Distinguished Flying Crosses, 62 other British decorations, 42 foreign decorations. Three Canadian and one Australian Divisions were commanded by graduates of the College.

The establishment of the College, as stated in the Act of 1874 (37 Vict., c. 36) was "for the purpose of imparting a complete education in all branches of military tactics, fortifications, engineering, and general scientific knowledge in the subjects connected with and necessary to a thorough knowledge of the military profession, and for qualifying officers for command and staff appointments". In addition to the foregoing, the course of instruction is such as to afford a thorough practical and scientific training in civil engineering, surveying, physics, chemistry, English, and French. The strict discipline maintained at the College is a valuable feature, and the constant practice of gymnastics, riding, drills, and outdoor exercises of all kinds promotes the health and good physical condition of the cadets.

The College is situated one mile from Kingston on the St. Lawrence river where it emerges from lake Ontario. The buildings of the College proper occupy a beautiful peninsula of 60 acres, lying between the mouth of the Cataraqui river and Navy bay. Additional adjacent grounds, on which stands the historic Fort Henry, make up a total of about 500 acres which are at the disposal of the College for use as a training area. On the point of the peninsula is situated Fort Frederick, built in 1837 just before Kingston became the capital of the "Province of Canada", the fort forming part of the defences of Kingston at that time. The College is under the supervision of the Department of National Defence, and is inspected annually by an advisory board composed of leading Canadian citizens, both civil and military, which makes its reports and recommendations to the Minister of National Defence. The College is commanded by a commandant, who is assisted by a staff adjutant and a competent staff of civil and military professors and instructors.

A four-year course leads to a 'diploma with honours', a 'diploma' or a 'certificate of military qualification'. A number of commissions in the Canadian Permanent Force and the Royal Canadian Air Force, as well as commissions in the British Regular Forces, the Indian Army, and the Royal Air Force, are offered annually to graduates; and for cadets who desire to obtain commissions in the Royal Canadian Navy a limited number of naval cadetships are available each year to cadets who successfully complete the first two years of study, and who are not over 20 years of age on the first of September of the year in which they desire to enter the Navy. To those graduates joining the British Army, the privilege of one and one-half years seniority is granted. This has been arranged in order to equalize

the seniority of graduates of the Royal Military College of Canada with those of the Royal Military Academy, Woolwich, or the Royal Military College, Sandhurst, since the courses at the latter institutions are shorter than the Canadian.

The principal Canadian universities admit recommended graduates to the fourth year of their civil engineering courses and to the third year of other engineering courses; and some of the universities admit graduates to the third years of arts and science courses. Cadets in their graduating year may now take special courses in mechanical, electrical, and mining engineering which, subject to recommendation, may permit them to enter fourth year in these subjects at Universities.

The R.M.C. diploma is accepted by the Law Societies and Bar Associations of Nova Scotia, Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia as the equivalent of a B.A. degree for admission to the study of law. The Dominion Association of Chartered Accountants likewise accepts R.M.C. graduates as registered students under the same conditions as university graduates.

Entrance to the College is on a competitive basis. Candidates are required to pass a rigid medical examination, and to have obtained junior matriculation or an acceptable equivalent. Applications for admission to the College should reach The Secretary, Department of National Defence, Ottawa, before May 31 of each year

Section 3.—Department of Public Works.*

Since Confederation and before, the constructing department of the Dominion Government has been known as the Department of Public Works. In 1879 the railways and canals were placed under the control of a new department, the building and maintenance of penitentiaries were transferred to the Department of Justice, the maintenance and construction of lighthouses to the Marine and Fisheries Department, and the smaller drill halls and armouries to the Department of National Defence. The work of the Department of Public Works is now divided into three principal branches, *viz.*, the Engineering Branch, the Architect's Branch, and the Telegraph Branch.

Engineering.—The Engineering Branch conducts the construction and repair of wharves, piers, breakwaters, dams, weirs, bank and beach protection works; the improvement of harbours and rivers by dredging; the construction, operation, and maintenance of dredging plant and the construction, operation, and maintenance of graving or dry docks. The construction and maintenance of interprovincial bridges and approaches thereto, also the construction, operation, and maintenance of bridges with movable spans on certain highways; hydrographical and topographical surveys which are required for the preparation of plans, reports, and estimates; test borings for the purpose of ascertaining the nature of foundations; the testing of cements and materials of construction; the licensing of international and interprovincial ferries, and the control of works constructed in or over navigable waters by authority of the Navigable Waters Protection Act (R.S.C., 1927, c. 140).

Architecture.—The Architect's Branch constructs and maintains Government buildings, post offices, customs houses, examining warehouses, quarantine stations, immigration and experimental farm buildings, military hospitals, and telegraph offices. It also constructs armouries and drill halls and leases office accommodation as required for the various Departments.

* Revised by J. M. Somerville, Secretary, Department of Public Works.

Telegraphs.—The Telegraph Branch has control of the construction, operation, and maintenance of all Government-owned telegraph lines and cables. These lines are located in the provinces of Nova Scotia, New Brunswick, Quebec, Ontario, Saskatchewan, Alberta, British Columbia, and Yukon (see also p. 722).

Graving Docks.—The Department constructed five dry docks and is responsible for subsidies under the Dry Dock Subsidies Act, 1910 (9-10 Edw. VII, c. 17). A description of these docks is given in the Transportation Chapter, pp. 687-688.

Expenditure and Revenue.—Table 4 shows the expenditures and revenues of the Public Works Department of the Dominion Government, for the fiscal years 1932-37.

4.—Expenditures and Revenues of the Public Works Department, fiscal years ended Mar. 31, 1932-37.

Item.	1932. \$	1933. \$	1934. \$	1935. \$	1936. \$	1937. \$
EXPENDITURES (Exclusive of Civil Government Appropriations).						
Harbour and river works...	5,000,984	3,044,495	2,408,303	4,801,179	6,748,662	5,807,294
Dredging plant, etc.....	2,520,843	1,510,174	1,172,582	1,683,714	2,262,102	2,220,535
Roads and bridges.....	342,330	138,598	53,776	103,795	494,456	521,198
Public buildings.....	11,264,114	7,980,561	6,371,217	8,439,151	20,396,875	14,892,505
Telegraphs.....	644,627	529,852	497,037	534,906	563,647	517,965
Miscellaneous.....	235,177	131,099	115,318	112,712	99,782	191,975
Unemployment relief works.	1,592,934	138,370	1	1	1	1
Totals.....	21,601,009	13,473,149	10,618,233	15,675,457	30,565,524	24,151,472
REVENUES.						
Graving docks.....	78,167	64,732	66,809	73,983	62,500	80,330
Rents.....	179,958	103,070	88,304	76,839	110,062	96,731
Telegraphs.....	188,248	170,984	162,562	172,017	174,691	191,511
Casual revenue.....	464,479	37,031	27,287	101,674	138,650	157,919
Ferries.....	2,869	2,740	2,723	2,706	3,022	2,847
Totals.....	913,722	378,557	347,685	427,219	488,925	529,338

¹ No expenditure reported for this year under this head.

Section 4.—The Indians and Eskimos of Canada.

Subsection 1.—The Indians of Canada.*

The Indians of Canada whose affairs are administered by the Department of Mines and Resources, Indian Affairs Branch, number about 112,510 (according to a departmental census taken in 1934), their numbers varying slightly from year to year. A small yearly increase is evident, and the popular notion that the race is disappearing is not in accordance with facts. Before they were subjected to the degenerating effects of European civilization and the devastating results of the many colonial

* Revised by T. R. L. MacInnes, Secretary, Indian Affairs Branch, Department of Mines and Resources.

wars, the numbers of the Indians were undoubtedly larger, but any reliable information as to the aboriginal population during either the French or the early British *régime* is non-existent, and there is no adequate basis for a comparison between the past and present aboriginal populations. An interesting sketch of the progress of the Indians of Canada since Confederation will be found in the Report of the Department of Indian Affairs, 1927.

Administration.*—Reserves have been set aside for the various bands of Indians throughout the Dominion, and the Indians located thereon are under the supervision of the local agents of the Department. The activities of the Department as guardian of the Indians, include the control of Indian education and health, the development of agriculture and other pursuits among them, the administration of their lands, community funds, estates, and the general supervision of their welfare.

The local administration of the Indian bands on the reserves scattered throughout the Dominion is conducted through the Department's agencies, of which there are in all 116. The number of bands included in an agency varies from one to more than 30. The staff of an agency usually includes various officers in addition to the agent, such as medical officer, clerk, farm instructor, field matron, constable, stockman, etc., according to the special requirements of the agency in question. The work of the agencies is supervised by the Department's inspectors, each inspector having charge of a certain number of agencies. Expenditures upon destitute Indians are made by the Dominion Government, either from public funds or from tribal funds of the Indians themselves.

The Indian Act provides for the enfranchisement of Indians. When an Indian is enfranchised he ceases to be an Indian under the law and acquires the full status of citizenship. In the older provinces, where the Indians have been longer in contact with civilization, many are becoming enfranchised. Great discretion, however, is exercised by the Government in dealing with this problem, as Indians who become enfranchised lose the special protection attached to their wardship, so that it is necessary to guard against premature enfranchisement.

Treaties.—In the older eastern provinces, the history of the Indians has been one of slow development with that of the community. In western Ontario, the Prairie Provinces, and the Territories the situation has been different. There, the rapid spread of civilization made it necessary to take prompt and effective measures to protect the moral claims of the Indians, which are recognized by the Government. Accordingly, treaties were entered into with the Indians, whereby the latter ceded to the Crown their aboriginal title and interest in the country. In consideration of such cession the Crown agreed to set aside adequate reserves, make cash grants, provide per capita annuities, give assistance in agriculture, stock-raising, hunting, trapping, etc., as particular circumstances might require, provide education for the Indian children, and otherwise safeguard the Indians' interests. These treaties have been made from time to time as occasion arose and as new territories were opened up. No treaty has been made with the Indians of British Columbia, except in the Peace River Block, but their welfare has received no less attention from the Government on that account.

Government Expenditure.—On Mar. 31, 1937, the capital of the Indian Trust Fund, which a year earlier had amounted to \$13,877,863, had increased to \$13,997,644. The amounts expended from the Consolidated Revenue Fund were

* For an outline of the early administration, see p. 937 of the 1932 Year Book.

as follows: voted by Parliament for the purposes of the Department, \$4,642,296; annuities by statute, \$245,063; and special supplementary, \$167,126.

Statistics.—Statistical tables of population, school attendance, income, and agricultural activities of the Indians in Canada follow. In Table 5 the populations for 1871-1931 are compiled from reports of the various censuses since Confederation, while the statistics and other information in the remaining tables are taken from the last Annual Report of the late Department of Indian Affairs. The Department takes a quinquennial census of Indians under its control, whereas census figures include all persons of Indian origin. The quinquennial census taken by the Department in 1934 showed a total of 112,510 as compared with 108,012 in 1929 and 104,894 in 1924, an increase of 7.3 p.c. in ten years. The details of the Census of 1934 are given in the Annual Report of the Department for that year. The figures of the decennial census include some thousands of persons of Indian race who are living off the reserves as ordinary citizens of Canada.

5.—Indian Population of Canada at the Decennial Censuses of 1871-1931.

Province or Territory.	1871. ¹	1881. ¹	1891. ²	1901.	1911.	1921.	1931.
Prince Edward Island.....	323	281	314	258	248	235	233
Nova Scotia.....	1,666	2,125	2,076	1,629	1,915	2,048	2,191
New Brunswick.....	1,403	1,401	1,521	1,465	1,541	1,331	1,685
Quebec.....	6,988	7,515	13,361	10,142	9,993	11,566	12,312
Ontario.....	12,978	15,325	17,915	24,674	23,044	26,436	30,368
British Columbia.....	23,000	25,661	34,202	28,949	20,134	22,377	24,599
Manitoba.....	56,000	56,239	51,249	16,277	7,876	13,869	15,417
Saskatchewan.....				26,304	11,718	12,914	15,268
Alberta.....				11,630	14,557	15,258	
Yukon.....				3,322	1,489	1,390	1,543
Northwest Territories.....				14,921	15,904	3,873 ³	4,046
Totals.....	102,358	108,547	120,638	127,941⁴	105,492	110,596	122,920

¹ Census figures in the organized provinces and estimates for the rest of Canada. ² Racial origin not taken in 1891; the figures have been taken from the report of the Department of Indian Affairs of that year.

³ The smaller Indian population of the Northwest Territories in 1921 is to be ascribed to the extension of the boundaries of Quebec, Ontario, and Manitoba in 1912. This also accounts for the increase in the 1921 Indian population of these provinces.

⁴ Includes 34,481 'half-breeds'.

Indian Education.—The educational work of the Department is now very extensive. In the fiscal year ended Mar. 31, 1937, a total of 365 Indian schools were in operation, including 80 residential schools for Indians with an enrolment of 9,040, and 275 day schools for Indians with an enrolment of 9,027 Indian pupils, also 10 combined public and Indian schools, with 230 Indian pupils enrolled. The total enrolment in the Indian schools has increased from 12,799 in 1915-16 to 18,297 in 1936-37 and the average attendance from 8,080 to 13,966 or from 63.1 p.c. to 76.3 p.c. of the enrolment. Continuation and high school work is now being taught in several of the day and residential schools. The amount spent on Indian education in the fiscal year ended Mar. 31, 1937, was \$1,820,977.

6.—Enrolment and Average Attendance of Pupils at Indian Schools, fiscal years ended Mar. 31, 1916-37.

Fiscal Year.	Residential Schools.		Day Schools.		All Schools.		
	Enrolment.	Average Attendance.	Enrolment.	Average Attendance.	Enrolment.	Attendance.	
						Number.	Per cent of Enrolment.
1916.....	4,661	4,029	8,138	4,051	12,799	8,080	63.1
1917.....	4,520	4,149	7,658	4,136	12,178	8,285	68.0
1918.....	4,692	4,081	7,721	3,797	12,413	7,878	63.5
1919.....	4,640	4,014	7,312	3,587	11,952	7,601	63.6
1920.....	4,719	4,133	7,477	3,516	12,196	7,649	62.7
1921.....	4,783	4,143	7,775	3,931	12,558	8,074	64.3
1922.....	5,031	4,360	7,990	4,308	13,021	8,668	66.6
1923.....	5,347	4,695	8,376	4,411	13,723	9,106	66.4
1924.....	5,673	4,856	8,199	4,332	13,872	9,188	66.2
1925.....	6,031	5,278	8,191	4,601	14,222	9,879	69.5
1926.....	6,327	5,658	8,455	4,940	14,782	10,598	71.7
1927.....	6,641	5,881	8,069	4,660	14,710	10,541	71.7
1928.....	6,795	6,043	8,223	4,823	15,018	10,866	72.4
1929.....	7,075	6,282	8,272	4,976	15,347	11,258	73.4
1930.....	7,302	6,476	8,441	5,103	15,743	11,579	73.6
1931.....	7,831	6,917	8,584	5,314	16,415	12,231	74.5
1932.....	8,213	7,400	8,950	5,707	17,163	13,107	76.4
1933.....	8,465	7,613	8,960	5,874	17,425	13,487	77.4
1934.....	8,596	7,760	8,852	5,592	17,448	13,352	76.5
1935.....	8,709	7,882	8,851	5,560	17,560	13,442	76.5
1936.....	8,906	8,061	9,127	5,788	18,033	13,849	76.8
1937.....	9,040	8,176	9,257	5,790	18,297	13,966	76.3

Economic Data.—Statistical information concerning the economic position of the Indians of Canada, including: acreages and value of Indian lands, by provinces; areas and yields of principal field crops of Indians, by provinces; numbers of farm live stock of Indians, with total value, by provinces; and sources and values of income of Indians, by provinces, will be found in Tables 7-10, which follow.

7.—Acreages (Classified) and Value of Indian Lands, by Provinces, Mar. 31, 1937.

Province.	Total Area of Reserves.	Area under Wood.	Lands Cleared but not under Cultivation.	Lands under Cultivation.	Value of Lands.
	acres.	acres.	acres.	acres.	\$
Prince Edward Island.....	1,668	1,457	23	188	1,600
Nova Scotia.....	19,656	16,415	2,322	919	83,110
New Brunswick.....	37,752	36,161	1,227	364	76,478
Quebec.....	193,721	165,022	17,568	11,132	1,419,035
Ontario.....	1,021,334	875,711	93,554	52,069	4,484,067
Manitoba.....	481,162	330,107	142,558	8,497	2,807,694
Saskatchewan.....	1,272,665	494,618	739,462	38,585	13,713,973
Alberta.....	1,273,644	401,925	807,097	64,622	16,283,278
British Columbia.....	789,255	461,471	291,285	33,499	13,599,201
Yukon and N.W.T.....	1,734	1,622	45	66	9,878
Totals.....	5,092,591	2,784,509	2,095,141	212,941	52,478,314

8.—Areas and Yields of Principal Field Crops of Indians, by Provinces, calendar year 1936.

Province.	Wheat.		Oats.		Other Grains.	
	acres.	bu.	acres.	bu.	acres.	bu.
Prince Edward Island.....	2	25	40	680	Nil	—
Nova Scotia.....	Nil	—	33	649	3	30
New Brunswick.....	2	30	105	880	17	165
Quebec.....	56	420	1,490	22,741	560	8,155
Ontario.....	1,502	27,194	18,498	187,564	3,283	21,772
Manitoba.....	1,583	12,794	1,737	23,855	1,414	12,044
Saskatchewan.....	11,656	96,666	10,597	117,841	1,053	8,877
Alberta.....	14,254	51,266	10,360	128,262	1,317	21,529
British Columbia.....	4,152	103,076	3,496	72,313	367	5,518
Yukon and N.W.T.....	Nil	—	Nil	—	Nil	—
Totals.....	33,207	291,471	46,356	554,785	8,014	81,090

Province.	Peas, Beans, etc.		Potatoes.		Other Roots.		Fodder, Hay, Cultivated, Wild, etc.
	acres.	bu.	acres.	bu.	acres.	bu.	tons.
Prince Edward Island.....	Nil	—	9	725	1	125	47
Nova Scotia.....	11	207	103	4,940	14	901	366
New Brunswick.....	9	154	65	2,910	13	1,050	167
Quebec.....	128	989	621	18,094	73	2,085	5,584
Ontario.....	867	11,882	1,857	60,299	617	17,913	25,574
Manitoba.....	30	346	407	18,479	15	505	22,580
Saskatchewan.....	1	10	368	14,430	84	1,082	37,341
Alberta.....	17	1,010	154	13,348	38	1,245	28,929
British Columbia.....	524	14,213	2,015	178,109	571	48,400	28,467
Yukon and N.W.T.....	1	20	43	1,241	15	545	90
Totals.....	1,588	28,831	5,642	312,575	1,441	73,851	149,145

9.—Numbers of Farm Live Stock of Indians, with Total Value, by Provinces, calendar year 1936.

Province.	Horses.	Cattle.	Pigs, Sheep, etc.	Poultry.	Value of Live Stock and Poultry.
	No.	No.	No.	No.	\$
Prince Edward Island.....	6	19	2	86	1,050
Nova Scotia.....	44	177	100	610	9,180
New Brunswick.....	9	54	24	415	4,672
Quebec.....	610	2,425	770	6,200	106,625
Ontario.....	2,841	5,270	4,013	36,562	401,775
Manitoba.....	1,537	3,803	414	6,215	204,975
Saskatchewan.....	4,658	7,333	771	9,175	435,510
Alberta.....	9,851	11,162	397	5,675	563,805
British Columbia.....	9,291	11,681	3,735	23,792	750,936
Yukon and N.W.T.....	44	7	2	30	4,280
Totals.....	28,891	41,931	10,228	88,760	2,482,808

10.—Values and Sources of Income of Indians, by Provinces, calendar year 1936.

Province.	Value Received from—					Wages Earned.	Total Income of Indians. ¹
	Farm Products, Including Hay.	Beef Sold or Used for Food.	Fishing.	Hunting and Trapping.	Other Industries.		
	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island ²	-	-	-	-	-	-	-
Nova Scotia.....	6,930	635	1,205	2,195	11,040	14,080	37,755
New Brunswick.....	6,500	350	1,365	1,575	2,930	11,475	26,884
Quebec.....	149,324	8,053	3,750	75,706	25,460	128,816	428,619
Ontario.....	337,759	22,033	227,105	326,389	139,335	376,645	1,829,862
Manitoba.....	121,771	20,141	45,190	189,600	36,125	79,700	588,051
Saskatchewan.....	269,165	59,189	33,775	97,591	34,205	42,730	683,796
Alberta.....	204,611	69,068	10,737	81,260	55,174	30,982	663,699
British Columbia.....	359,530	81,505	384,984	169,240	133,524	401,960	1,596,241
Yukon and N.W.T.....	7,674	498	17,330	173,186	7,230	22,133	247,141
Totals³.....	1,463,264	261,472	725,441	1,116,742	445,023	1,108,521	6,102,050

¹ Includes income received from timber and mining dues and from annuities earned as interest on Indian trust funds, but does not include money received from land rentals for which figures are not available by provinces.

² No income was reported for Indians of Prince Edward Island in 1936.

³ See footnote 2.

Subsection 2.—The Eskimos of Canada.*

The Eskimos of Canada are found principally on the northern and Hudson Bay coasts of the mainland and on islands in the Arctic archipelago and in Hudson bay, although in the Baker Lake-Chesterfield Inlet area on the west side of Hudson bay there are bands of Eskimos who are essentially an inland people, and who subsist chiefly on caribou. The diet of the coast Eskimos is largely marine mammals and fish, varied at times by caribou obtained from the interior during the seasonal migrations of these animals. The skins of the caribou are used for winter clothing.

The wandering life of the Eskimos and the vast area over which they are scattered present great difficulties in ascertaining their exact numbers. The total for the entire Dominion, according to the latest returns, is about 6,000, located mainly in the Northwest Territories, with approximately 1,590 in Quebec, 85 in Yukon Territory, 62 in Manitoba, and 3 in Alberta.

The administrative care of Eskimos outside of the organized provinces devolves upon the Department of Mines and Resources which, by regulative measures (including the setting aside of game preserves where only natives may hunt and the establishment of a reindeer herd), conserves the natural resources necessary to their subsistence. Contact with the Eskimos is maintained through permanent stations in the Eastern, Central, and Western Arctic, (at a number of which medical officers are located), by patrols of the Royal Canadian Mounted Police, and by means of the annual Canadian Eastern Arctic Patrol by steamship.

* Prepared under the direction of R. A. Gibson, Director, Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa.

Section 5.—Pensions and other Provision for War Veterans.*

Pensions Section.—This Section is responsible for the administration of returned soldiers' affairs under the Department of Pensions and National Health Act, the War Veterans' Allowance Act, and the Veterans' Assistance Commission Act. It is also responsible, by direction of the Canadian Pension Commission, for certain administrative duties under the Pension Act and the Returned Soldiers' Insurance Act. The Representative of the Treasury is responsible for all payments under these Acts.

The Annual Report for the fiscal year ended Mar. 31, 1937, shows a decrease from the previous year in the number of ex-members of the Forces who received in-patient hospital treatment, the number being 11,742 as against 12,835 in 1935-36, 12,560 in 1934-35, 11,718 in 1933-34, and 13,342 in 1932-33. The Department maintains eight hospitals, situated in the following centres: Halifax, Saint John, Ste. Anne de Bellevue, Toronto, London, Winnipeg, Calgary, and Vancouver. A sheltered employment workshop is operated at Montreal and one shop by the Red Cross Society at Victoria.

One of the features of the activities of the Department is provision in a departmental institution for pensioners who through age or infirmity are unable to care for themselves. The number of such cases showed an increase during the year, the total on Mar. 31, 1937, being 299 as against 286 a year previously, 235 on Mar. 31, 1935, 250 on Mar. 31, 1934, 213 on Mar. 31, 1933, and 198 on Mar. 31, 1932. The issue of orthopaedic and surgical appliances has been maintained with a slight decrease. The number of pensioners who have been granted relief was 12,322 in 1936-37 as compared with 12,083 in 1935-36, 11,541 in 1934-35, 12,735 in 1933-34, 14,368 in 1932-33, 12,303 in 1931-32, and 8,811 in 1930-31. The expenditure on relief in 1936-37 was \$2,435,285; in 1935-36, \$2,365,579; in 1934-35, \$2,042,355; in 1933-34, \$1,912,563; in 1932-33, \$1,978,284; 1931-32, \$2,082,052; and 1930-31, \$907,010.

The provision under which the Department assumes responsibility in respect of accidents sustained by pensioners of 25 p.c. and upwards when engaged in industry has been continued. During the fiscal year under review, the number of claims was 260; in 1935-36, 279; in 1934-35, 222; in 1933-34, 180; in 1932-33, 179; and in 1931-32, 200. The expenditure was as follows; 1936-37, \$18,590; 1935-36, \$27,138; 1934-35, \$23,103; 1933-34, \$36,420; 1932-33, \$17,641; 1931-32, \$49,878. The expenditure is largely governed by the number of fatal and serious accidents.

The following is a summary statement of the manner in which the funds appropriated by Parliament have been dealt with, and also sets forth the costs of administration and the adjudication of pensions.

NET PAYMENTS BY DEPARTMENT OF PENSIONS AND NATIONAL HEALTH FOR THE FISCAL YEAR ENDED MAR. 31, 1937.

PENSIONS BRANCH.	
<i>Net Cash Payments—</i>	
European War pensions.....	\$ 41,424,433
War Veterans' allowances.....	3,178,616
Unemployment relief.....	2,435,285
Sheltered employment.....	18,421
Hospital allowances.....	1,083,919
Total Paid in Cash.....	\$48,140,674

* Revised by F. H. Brown, Assistant Secretary, Department of Pensions and National Health. See also the 1930 Year Book, pp. 982-983.

NET PAYMENTS BY DEPARTMENT OF PENSIONS AND NATIONAL HEALTH FOR THE
FISCAL YEAR ENDED MAR. 31, 1937—concluded.

PENSIONS BRANCH—concluded.

Net Cost of Services—

Hospital treatment.....	\$ 2,732,088
Employers' liability compensation.....	18,590
Last Post Fund.....	60,000
Canadian Legion.....	9,000
Transportation, pensioners, patients, etc.....	84,945
After-care of the blind and transportation of blinded ex-soldiers.....	6,311

Indirect Payments to and on behalf of Ex-Members of the Forces
and their Dependents.....

\$ 2,910,934

*Other Expenditures and Operations, including Payment of Militia (Statute) and other
Pensions, Trust Funds under Administration, Recoverable Expenditures,
Returned Soldiers' Insurance, etc.—*

Militia pensions (statute).....	\$ 1,356,182
North West Rebellion and civil flying.....	20,056
Interest on trust funds.....	6,488
War service gratuities.....	17,355
Returned soldiers' insurance.....	852,549
Pensions under administration.....	952,885
Capital expenditures.....	27,934
Recoverable expenditures.....	83,554
Veterans' Assistance Commission.....	99,572
	<u>\$ 3,416,575</u>

Total Expenditure apart from Cost of Administration.....

\$ 54,468,183

Cost of Administration—

Departmental—

Salaries.....	\$ 910,206
General.....	150,166
	<u>\$ 1,060,372</u>
Canadian Pension Commission.....	517,912
Veterans' Bureau.....	190,481
Pension Appeal Court.....	66,238
Comptroller of the Treasury.....	413,418
	<u>\$ 2,248,421</u>

Total Expenditure.....

\$ 56,716,604

To arrive at the actual cost of administration, not only expenditure, but income and turnover of trust funds must be included. In addition, therefore, to the foregoing, the administration cost should be spread over the following:—

Revenue and refunds.....	\$ 877,836
Casual revenue.....	144,374
Deposits to War Service Gratuity Fund.....	451
Returned Soldiers' Insurance premiums and interest.....	1,941,204
Funds deposited to trust accounts, pensions under administration, etc.....	961,538
	<u>\$ 3,925,403</u>

The Canadian Pension Commission.—By c. 45 of the Statutes of 1933, the Board of Pension Commissioners for Canada and the Pension Tribunal ceased to exist; their duties were taken over by the Canadian Pension Commission, which was formed by the Act referred to, and the personnel of the Commission was increased from three to not less than eight nor more than twelve. Twelve members have been appointed.

The Commission is responsible for the adjudication and awarding of pensions in respect of disabilities connected with military service and the awarding of pensions to the dependants of those who die. It operates under the authority of the Pension Act. The following table shows the number of pensions in force at the end of the fiscal years 1918 to 1937, together with the annual liability. The large increase in disability pensioners from 1930 to 1933, inclusive, was primarily due to the reinstatement on pension of those who had commuted their pensions from 1920 onwards. This restoration was under the authority of an amendment to the Pension Act in 1930.

11.—Pensions in Force as at Mar. 31, 1918-37.

Fiscal Year.	Dependants.		Disabilities.		Totals.	
	Number of Pensions.	Liability.	Number of Pensions.	Liability.	Number of Pensions.	Liability.
		\$		\$		\$
1918.....	10,488	4,168,602	15,335	3,105,126	25,823	7,273,728
1919.....	16,753	9,593,056	42,932	7,470,729	59,685	17,063,785
1920.....	17,823	10,841,170	69,203	14,335,118	87,026	25,176,288
1921.....	19,209	12,954,141	51,452	18,230,697	70,661	31,184,838
1922.....	19,606	12,687,237	45,133	17,991,535	64,739	30,678,772
1923.....	19,794	12,279,621	43,263	18,142,145	63,057	30,421,766
1924.....	19,971	12,037,843	43,300	18,787,206	63,271	30,825,049
1925.....	20,015	11,804,825	44,598	19,816,380	64,613	31,621,205
1926.....	20,005	11,608,530	46,385	21,456,941	66,390	33,065,471
1927.....	19,999	11,419,276	48,027	22,811,373	68,026	34,230,649
1928.....	19,975	11,209,351	50,635	24,374,502	70,610	35,583,853
1929.....	20,002	11,090,158	54,620	26,095,150	74,622	37,185,308
1930.....	19,644	10,742,518	56,996	27,059,992	76,640	37,802,510
1931.....	19,676	10,985,518	66,669	29,226,208	86,345	40,211,726
1932.....	19,308	10,859,806	75,878	30,998,571	95,186	41,858,377
1933.....	18,745	10,624,775	77,967	31,124,543	96,712	41,749,318
1934.....	18,236	10,339,971	77,855	30,453,454	96,091	40,793,425
1935.....	18,241	10,372,607	78,404	30,406,414	96,645	40,779,021
1936.....	18,175	10,381,121	79,124	30,473,353	97,299	40,854,474
1937.....	18,186	10,417,158	79,789	30,365,865	97,975	40,783,023

The number of medical examinations for pension purposes carried out during the fiscal year was 24,909, being a decrease of 799 as compared with the previous year.

STATEMENT SHOWING THE TOTAL NUMBERS OF PERSONS IN RECEIPT OF BENEFITS UNDER THE PENSION ACT AS AT MAR. 31, 1936 AND 1937.

	1936.	1937.
Disability pensioners.....	79,124	79,789
Disability pensioners' wives.....	57,371	57,439
Disability pensioners' children.....	95,052	88,543
Disability pensioners' other relatives.....	1,503	1,411
Disability pensioners (housekeepers, Sections 22-9 and 77B, Pension Act).....	155	412
	233,205	227,594
Dependent pensioners.....	18,175	18,186
Dependent pensioners' children.....	3,819	3,675
Other relatives in addition to main dependants.....	1,547	1,507
	23,541	23,368

SUPPLEMENTARY PENSIONS IN EFFECT.

<i>Disability—</i>			
Militia Pension Act (Sections 48 and 49, Pension Act)....	22		22
Supplementary to awards paid by the United Kingdom (Sections 45 and 47, Pension Act).....	261		257
R.N.W.M. Police Supplementary (Sec. 48, Pension Act)...	3		2
	286		281
<i>Dependent—</i>			
Militia Pension Act (Sections 48 and 49, Pension Act)....	6		6
Supplementary to awards paid by the United Kingdom (Sections 46 and 47, Pension Act).....	48		50
Supplementary to awards paid by Belgium (Section 46, Pension Act).....	1		1
Supplementary to awards paid by France (Section 46, Pension Act).....	31		31
Supplementary to awards paid by Italy (Section 46, Pension Act).....	3		4
	89		92
Grand Totals.....	257,121		251,335

Rates of pensions for all ranks will be found in tables on pp. 960-962 of the 1925 Year Book, to which the reader is referred.

Pension Appeal Court.—This Court continues to function and the following is a summary of decisions rendered during the year ended Mar. 31, 1937:—

DECISIONS RENDERED ON APPEALS.

By applicants from Pension Tribunal decisions—		
Allowed.....	Nil	
Disallowed.....	122	
		122
By applicants from decisions of the Canadian Pension Commission—		
Allowed.....	9	
Disallowed.....	105	
Remitted.....	2	
		116
By applicants from decisions of Quorums of the Commission—		
Allowed.....	13	
Disallowed.....	2,172	
Remitted.....	17	
		2,202
By the Crown from decisions of Quorums of the Commission—		
Allowed.....	24	
Disallowed.....	34	
Remitted.....	27	
		85
		2,525

DECISIONS RENDERED ON APPLICATIONS.

That leave be granted to the Canadian Pension Commission to entertain a new application—		
Allowed.....	72	
Disallowed.....	181	
		253
For leave to renew before the Court applications for Compassionate Pension or Allowance under Section 21 of the Act—		
Allowed.....	2	
Disallowed.....	17	
		19
For Compassionate Pension or Allowance under Section 21 of the Act—		
Allowed.....	1	
Disallowed.....	1	
		2
		274

Veterans' Bureau.—Pursuant to legislation passed in 1930, a Veterans' Bureau was organized as a branch of the Department and came into active operation on Oct. 1, 1930. The duties of the Bureau are set forth on p. 945 of the Canada Year Book, 1932. Briefly stated, the Bureau was created and is operated to assist applicants for pension in the preparation and presentation of their cases. There is a Chief Pensions Advocate with his staff at Ottawa, and Pensions Advocates have their offices in all the principal cities of Canada.

War Veterans' Allowances.—A synopsis of the War Veterans' Allowance Act, which came into force on Sept. 1, 1930, appears on p. 946 of the Canada Year Book, 1932. The following statistics show the activities of the War Veterans' Allowance Board for the fiscal years ended Mar. 31, 1936 and 1937.

NUMBERS OF RECIPIENTS AND ANNUAL LIABILITY.

Item.	1936.		1937.	
	Number of Cases.	Annual Liability.	Number of Cases.	Annual Liability.
		\$		\$
Veterans' allowance payments in force at beginnings of fiscal years.....	7,186	2,243,475	8,820	2,780,271
Awards during fiscal years.....	2,107	652,780	3,024	935,677
Increases due to change in rates.....	—	29,040	—	29,529
Reinstatements.....	158	48,254	173	49,395
Totals.....	9,451	2,973,549	12,017	3,794,872
Cancellations, on account of death, etc.....	631	193,278	711	211,493
Payments in force, Mar. 31, 1936, and Mar. 31, 1937 ...	8,820	2,780,271	11,306	3,583,379

ANALYSIS OF AWARDS AND REINSTATEMENTS MADE FROM SEPT. 1, 1930, TO
MAR. 31, 1937.

Item.	Over 60.	Under 60.	Total.
Allowances approved and reinstated from Sept. 1, 1930, to Mar. 31, 1936.....	6,864	4,893	11,757
Awards Apr. 1, 1936, to Mar. 31, 1937.....	1,340	1,684	3,024
Reinstatements, Apr. 1, 1936, to Mar. 31, 1937.....	87	86	173
Total awards and reinstatements to Mar. 31, 1937.....	8,291	6,663	14,954
Cancellations for all reasons, by deaths, etc., from Sept. 1, 1930, to Mar. 31, 1937.....	—	—	3,648
Total number of veterans in receipt of allowances at Mar. 31, 1937.....	—	—	11,306

Returned Soldiers' Insurance.*—The Returned Soldiers' Insurance Act is under the jurisdiction of the Canadian Pension Commission as agent for the Minister of Finance. Collections are made through the Department and payments by the Representative of the Treasury. After several extensions, the date to which applications could be received expired on Aug. 31, 1933. The following statement shows the operations under this Act during the fiscal years ended Mar. 31, 1935-38.

	1935.	1936.	1937.	1938.
Applications received.....	Nil	Nil	Nil	Nil
Applications accepted.....	4	Nil	Nil	Nil
Applications rejected.....	Nil	Nil	Nil	Nil
Numbers of policies issued.....	4	Nil	Nil	Nil
Numbers of policies reinstated.....	1,957	1,557	444	1,051
Numbers of policies surrendered for cash.....	844	694	583	441
Numbers of policies in force.....	26,933	25,845	24,801	23,880
Amounts of insurance.....	\$57,903,583	\$55,326,246	\$52,802,684	\$50,677,796
Amounts of premium income.....	\$ 1,498,457	\$ 1,410,220	\$ 1,327,149	\$ 1,250,516
Expenditures.....	\$ 844,241	\$ 778,317	\$ 852,548	\$ 843,813
Numbers of death claims from commencement of operations.....	3,500	3,776	4,085	4,361
Amounts of death claims.....	\$ 8,957,368	\$ 9,514,848	\$ 1,563,631	\$ 531,619
Balances on hand.....	\$13,487,884	\$14,676,572	\$15,765,227	\$16,826,686

Section 6.—Soldier Settlement of Canada.†

At the end of the calendar year 1937 the Soldier Settlement of Canada had 19,871 farm properties under administration, representing a net investment of \$49,690,377. Under the Soldier Settlement Act of 1919, 25,014 soldier settlers were established on the land with loans. On Dec. 31, 1937, there were 9,683 soldier settlers, 5,811 civilian settlers, and 1,778 settlers under the British Family Scheme. There were 2,599 farms on hand of which 1,882 were leased; 3,559 settlers had repaid their loans in full in cash; 1,977 properties had been transferred to municipalities and provinces under Sec. 21A of the Soldier Settlement Act.

Under the 3,000 British Family Scheme 3,346 families came forward for settlement. Of these 1,740 had withdrawn as at Dec. 31, 1937, 21 had repaid their loans, leaving 1,585 families still operating their farms. Under the New Brunswick Family Settlement Agreement, 359 families came forward; of these 166 had withdrawn, and 193 remained on the land.

* Revised by D. S. Drew, Chief, Insurance Division, Department of Pensions and National Health.

† Revised by F. C. Blair, Director, Soldier Settlement of Canada.

The following numbers of settlers had applied for the benefits of the Farmers' Creditors Arrangement Act; 950 soldier settlers, 562 civilian settlers, 527 British Family settlers. Of this number 534 cases of soldier settlers had been disposed of, involving indebtedness of \$1,911,508 and a reduction of \$562,765; civilians, 370 cases disposed of, debt \$1,309,763, reduction \$391,620; British Family settlers, 285 cases disposed of, indebtedness \$1,195,159, reduction \$443,214.

The supervision staff of the Department have made land appraisals and reported on the application of settlers (other than those under the Soldier Settlement of Canada) under the Farmers' Creditors Arrangement Act. To Dec. 31, 1937, 7,573 land appraisals and reports had been made in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, and the Maritime Provinces.

Other investigational services in the calendar year 1937 were: 844 investigations for the Department of Mines and Resources; 4,014 investigations in rural districts with respect to applications under the War Veterans' Allowance Act of 1930; 3,057 investigations for the Department of Pensions and National Health and the Canadian Pension Commission with respect to applications for relief allowances and special investigations of pension cases in rural districts.

Section 7.—Department of the Secretary of State.*

The Department of the Secretary of State was constituted in its present form in 1873, through the merging of the previously-existing offices of the Secretaries of State for Canada and for the provinces. The Secretary of State is the official mouthpiece of the Government as well as the medium of communication between the Dominion and Provincial Governments, all correspondence between the Governments being conducted by him with the Lieutenant-Governors. He is also the custodian of the Great Seal of Canada and the Privy Seal as well as the channel by which the general public may approach the Crown.

The Secretary of State is also the Registrar General, registering all proclamations, commissions, licences, warrants, writs, and other instruments issued under the Great Seal and the Privy Seal. He is further charged with the administration of the Boards of Trade Act, the Companies Act, the Canada Temperance Act, the Copyright Act, the Naturalization Act, the Patent Act, the Trade Unions Act, the Ticket of Leave Act, the Unfair Competition Act, and with the collection and tabling of parliamentary returns. Statistics regarding patents and copyrights appear under Chapter XVII at pp. 611-613. The following information on other subjects has been secured in the course of administration.

Charters of Incorporation.—The number of companies incorporated under the Companies Act and amending Acts during the fiscal year ended Mar. 31, 1937, was 410 with a total capitalization of \$130,767,280. Supplementary letters patent were granted during the year to 341 companies, 72 of which increased their capital stock by the aggregate amount of \$143,597,766; 105 decreased their capital stock by \$123,837,999; the remaining 84 were granted supplementary letters patent for various purposes, such as changing names, extending powers, etc. The total capitalization of new companies plus the increase of capital of existing companies amounted to \$274,365,046, partly offset by the above-mentioned decreases in capitalization totalling \$123,837,999.

* Revised by E. H. Coleman, K.C., LL.D., Under-Secretary of State, Department of the Secretary of State.

In Table 12 will be found the number and capitalization of companies incorporated during the years 1900-37.

12.—Number and Capitalization of Companies Incorporated under the Companies Act and Amending Acts, calendar years 1900-07, and fiscal years ended Mar. 31, 1908-37.

Year.	New Companies.		Old Companies.		Gross Increase in Capitalization. ¹	Old Companies.		Net Increase of Capitalization. ¹
	Number.	Capitalization. ¹	Number.	Increase in Capital. ¹		Number.	Decrease in Capital. ¹	
		\$		\$	\$		\$	\$
1900.....	53	9,558,900	2	3,351,000	12,909,900	2	2	12,909,900
1901.....	55	7,662,552		3,420,000	11,082,552			11,082,552
1902.....	126	51,182,850		5,055,000	56,237,850			56,237,850
1903.....	187	83,405,340		5,854,520	89,259,860			89,259,860
1904.....	206	80,597,752		3,366,000	83,963,752			83,963,752
1905.....	293	99,910,900	2	9,685,000	109,595,900	2	2	109,595,900
1906.....	374	180,173,075		32,403,000	212,576,075			212,576,075
1907.....	378	132,686,300		19,091,900	151,778,200			151,778,200
1908 (3 mos.)	64	13,299,000		865,000	14,164,000			14,164,000
1909.....	366	121,624,875		72,293,000	193,917,875			193,917,875
1910.....	420	301,788,300	44	46,589,500	348,377,800	4	670,600	347,707,200
1911.....	454	458,415,800	45	24,715,600	483,131,400	4	10,650,000	472,481,400
1912.....	575	447,626,999	44	42,939,000	490,565,999	7	17,880,800	472,685,199
1913.....	835	625,212,300	54	55,549,900	680,762,200	5	11,861,381	668,900,819
1914.....	647	361,708,567	61	63,599,003	425,307,570	3	3,290,000	422,017,570
1915.....	461	208,283,633	34	26,650,000	234,933,633	4	6,840,000	228,093,633
1916.....	534	157,342,800	28	68,996,000	226,338,800	11	4,811,700	221,527,100
1917.....	606	207,967,810	36	26,540,000	234,507,810	3	5,050,000	229,457,810
1918.....	574	335,982,400	41	69,321,400	405,303,800	4	1,884,300	403,419,500
1919.....	512	214,326,000	69	67,583,625	281,909,625	11	2,115,985	279,793,640
1920.....	991	603,210,850	88	85,187,750	688,398,600	10	19,530,000	668,868,600
1921.....	852	752,062,683	135	79,803,000	831,865,683	17	7,698,300	824,167,383
1922.....	875	351,555,900	43	18,275,000	369,830,900	13	5,121,450	364,709,450
1923.....	752	314,603,050	45	46,108,500	360,711,550	30	10,751,123	349,960,427
1924.....	604	204,646,283	58	15,352,755	219,999,038	27	57,944,410	162,054,628
1925.....	663	231,044,800	47	15,549,573	246,594,373	28	43,863,633	202,730,740
1926.....	801	353,342,800	48	33,303,500	386,646,300	47	43,797,780	342,848,520
1927.....	836	692,540,500	70	33,524,000	726,064,900	40	16,905,045	709,159,855
1928.....	1,102	538,595,970	82	179,167,100	717,762,670	31	37,123,580	680,639,090
1929.....	1,202	1,406,006,340	128	412,396,320	1,818,402,660	40	48,005,533	1,770,397,127
1930.....	1,280	1,346,138,367	127	293,496,800	1,639,635,167	35	46,955,000	1,592,680,167
1931.....	898	562,613,797	75	153,524,400	716,138,197	39	50,604,545	665,533,652
1932.....	760	294,770,312	43	27,981,750	322,752,062	44	52,773,618	269,978,444
1933.....	548	145,453,718	38	44,621,950	190,075,668	46	31,636,447	158,439,221
1934.....	531	175,239,320	38	62,615,060	237,854,380	61	86,810,799	151,043,581
1935.....	472	171,689,140	47	35,416,353	207,105,493	60	73,634,742	133,470,750
1936.....	371	141,237,550	41	54,073,000	195,310,550	76	79,640,610	115,669,940
1937.....	410	130,767,280	72	143,597,766	274,365,046	105	123,837,999	150,527,047

¹ Includes consideration of the amounts of capital received on the issue of shares without nominal or par value.

² Not reported prior to 1910.

Naturalizations.—The naturalizations effected under the Naturalization Act (R.S.C., 1906, c. 77) for the calendar years 1908-17, inclusive, were given on p. 594 of the Year Book for 1919. Since Jan. 1, 1918, the only method of obtaining naturalization has been under what is known as the 'Imperial' Naturalization Act, which came into force on Jan. 1, 1915. This Act was known under the title of the Naturalization Act, 1914, until July 7, 1919, when it was repealed and the Naturalization Act, 1919, came into force. On July 1, 1920, the Naturalization Act, 1919, was repealed, and the Naturalization Act, 1914, was revived and amended under the title of the Naturalization Acts, 1914 and 1920. By an amendment passed by Parliament in 1923, the restriction by which persons of alien enemy birth were

ineligible to receive certificates of naturalization for a period of 10 years after the termination of the War was removed, and at the present time any alien may apply for naturalization, regardless of his nationality. All these Acts have been consolidated in R.S.C., 1927, c. 138. Since Jan. 15, 1932, women British subjects, marrying aliens, retain their British nationality, unless they, by marriage, acquire their husbands' nationalities, and the wives of aliens no longer become British subjects through their husbands' naturalization. They must apply to the Secretary of State.

Table 13 shows the number of naturalization certificates issued to single persons or heads of families under these Acts during the calendar years from 1927 to 1936. The total numbers of persons naturalized during the fiscal years ended Mar. 31, 1936 and 1937, were 30,678 and 31,744, respectively, including (except as stated above) the wives and minor children of those to whom naturalization certificates were issued.

13.—Naturalizations in Canada, by Principal Nationalities, under the Naturalization Act, calendar years 1927-36.

Nationality.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Albanian.....	8	11	9	4	4	2	2	4	4	5
Argentinian.....	2	2	1	4	3	3	2	5	4 ¹	10
Austrian.....	925	728	890	1,004	1,050	1,057	659	804	1,015	996
Austro-Hungarian.....	7	2	5	4	5	3	5	267	3	4
Belgian.....	157	169	264	274	257	284	305	267	383	373
Brazilian.....	-	-	3	1	Nil	2	Nil	2	Nil	4
Bulgarian.....	59	46	64	41	37	44	30	37	46	53
Chinese.....	29	28	24	23	22	5	1	1	7	6
Costa Rican.....	-	-	-	-	-	-	-	-	-	Nil
Czechoslovak.....	38	57	287	287	646	1,078	964	910	1,052	1,080
Danish.....	116	132	208	217	249	285	390	418	677	771
Danzigers.....	1	1	Nil	1	2	5	4	5	2 ¹	7
Dutch.....	79	64	112	143	203	229	197	181	356	434
Egyptian.....	1	Nil	1	1	Nil	Nil	2	Nil	1	Nil
Estonian.....	2	8	9	10	14	16	24	34	51	44
Finnish.....	128	133	288	276	319	329	359	410	601	601
French.....	123	98	118	119	154	127	126	103	154	219
German.....	183	171	288	420	449	530	675	899	1,495	2,079
Greek ²	162	153	173	181	97	121	113	157	216	193
Hungarian.....	37	45	184	396	780	829	721	856	1,166	1,138
Icelandic.....	15	17	12	17	30	21	8	24	31	29
Italian.....	1,270	1,146	1,739	1,186	1,183	1,418	1,265	779	829	894
Japanese.....	17	35	18	33	7	Nil	1	10	49	49
Latvian.....	17	30	25	25	29	34	29	39	61	56
Lithuanian.....	46	55	55	46	130	192	275	332	427	514
Luxemburger.....	2	5	4	2	4	8	5	Nil	4	12
Memel Territory.....	-	-	-	-	-	-	-	-	1	Nil
Mexican.....	1	Nil	1	Nil	2	Nil	1	Nil	3	Nil
Montenegrin.....	-	-	-	-	-	-	-	-	2 ¹	Nil
Norwegian.....	202	197	424	381	412	453	498	521	687	737
Palestinian.....	2	4	6	6	4	1	5	10	15	11
Persian.....	2	3	1	4	1	4	3	Nil	3	4
Polish.....	1,189	962	1,295	1,218	2,623	4,240	3,749	4,279	6,113	6,302
Roumanian.....	570	437	671	588	614	781	720	852	1,195	1,157
Russian.....	981	858	1,687	1,940	2,527	2,936	1,970	1,807	2,178	2,256
Spanish.....	5	10	7	8	8	9	5	5	5	7
Swedish.....	258	242	295	310	442	375	385	444	638	704
Swiss.....	9	13	26	38	27	61	47	64	90	125
Syrian.....	-	-	-	-	53	86	77	60	69	55
Turkish ³	136	128	160	174	56	40	30	33	54	28
United States.....	963	939	1,073	1,104	1,652	1,877	1,374	1,240	1,905	2,170
Yugo-Slav (Serb-Croat-Slovene).....	80	78	295	404	646	1,018	1,160	979	882	888
All others.....	6	12	12	16	11	24	54	47	66 ¹	55
Totals.....	7,828	7,019	10,734	10,906	14,752	18,527	16,240	16,618	22,541¹	24,070

¹ Revised since the publication of the 1936 Year Book.

² Includes 1 Greek Albanian for 1927 and 1 Greek Macedonian for 1930.

³ Turkish includes also Syrian, Armenian, Greek, Bulgarian, Palestinian, and Mesopotamian Turks.

Canada Temperance Act.—Under Parts I and II of this Act, provision is made for the prohibition of the sale of intoxicating liquors in counties and cities. The last vote taken under these parts was in the County of Compton, Quebec, on Apr. 28, 1930, in response to a petition for the repeal of the Act in that county. The vote resulted in favour of the repeal, which became effective on June 14, 1930. Part III of the Act relates to penalties and prosecutions, Part IV to the prohibition of the importation and exportation of intoxicating liquors into and from the provinces, while Part V enacts provisions in aid of provincial legislation for the control of the liquor traffic.

Section 8.—Royal Canadian Mounted Police.*

The Royal Canadian Mounted Police is a constabulary maintained by the Dominion Government. It was organized in 1873, and was known as the North West Mounted Police, whose duties were confined to what was then known as the Northwest Territories. In 1904 its name was changed to Royal North West Mounted Police.

In 1905, when Alberta and Saskatchewan were constituted provinces, an arrangement was made whereby the Force continued to discharge its duties as formerly, each province making a contribution towards defraying the cost. This was continued until 1917. Soon after the close of the Great War an extension of Governmental activities made it obvious that the enforcement of Dominion Statutes was assuming increasing proportions, and that it would soon be necessary to have a police force responsible therefor. In 1918, to the Royal North West Mounted Police was assigned the duty of the enforcement of Dominion legislation for the whole of Western Canada, west of Port Arthur and Fort William, and in 1920 for the whole of Canada.

In 1920, the name of the Force was changed to the Royal Canadian Mounted Police, and the former Dominion Police with headquarters at Ottawa, whose duties were largely connected with guarding public buildings in that city and the Canadian Government dockyards at Halifax, N.S., and Esquimalt, B.C., were absorbed by the Royal Canadian Mounted Police.

At the present time, the R.C.M. Police is responsible throughout Canada for the enforcement of the laws against smuggling by land, sea, and air. It enforces the provisions of the Excise Act, is responsible for the suppression of the traffic in narcotic drugs, enforcement of the Migratory Birds Convention Act, and assists the Mines and Resources, Fisheries, and numerous other Dominion Departments, in executing the provisions of their respective Acts, and in some cases in administrative duties. It is responsible for the protection of government buildings and dockyards. It is the sole police force operating in the Yukon Territory and the Northwest Territories, and performs a variety of services in all provinces and both Territories for the Dominion Government.

Under the R.C.M. Police Act, any province may enter into an agreement with the Dominion Government for the services of the Royal Canadian Mounted Police, to enforce provincial laws and the Criminal Code, upon payment for its services, and at the present time such agreements are in force with the provinces of Prince Edward Island, Nova Scotia, New Brunswick, Manitoba, Saskatchewan, and Alberta.

The Force is controlled and administered by a Minister of the Crown (at present the Minister of Justice) and it may be employed anywhere in Canada. From a force of 300 in 1873, it had a strength on Dec. 31, 1937, of 2,620. Its means of trans-

* Revised by Col. S. T. Wood, Commissioner, Royal Canadian Mounted Police.

port at that time consisted of 206 horses, 526 motor vehicles and 444 sleigh dogs. The Force is organized into 14 divisions of varying strength, distributed over the entire country. The term of engagement is five years for recruits, with re-enlistment for a period not exceeding five years. The Officers are commissioned by the Crown. Recruits are trained at Regina, Sask. The course of training is six months, and consists of drill, both mounted and dismounted, physical training including instruction in wrestling, boxing, and jiu-jitsu. Special attention is paid to police duties, both Dominion and provincial, and detailed lectures are given in these, including court procedure. Instructional courses for promotion are held, and, where practicable, an annual refresher course of training is given.

In 1937, a 'Reserve' strength of 300 men was authorized by Parliament, and during the months of July and August, 1937, 300 'Reservists' were given training at Fredericton, N.B., Ottawa, Ont., Regina, Sask., and Vancouver, B.C., and in future these 'Reservists' will be the principal source from which recruits for the Force will be drawn.

14.—Strength and Distribution of the Royal Canadian Mounted Police as at Dec. 31, 1937.

Place.	Com-mis-sioner.	Deputy Com-mis-sioners.	Asst. Com-mis-sioners.	Super-intend-ents.	Inspec-tors.	De-ctive Inspec-tors.	Sub-Inspec-tors.	Sur-geons.	Staff Ser-geants	Ser-geants	Cor-por-als.
P.E.I.....	Nil	Nil	Nil	Nil	1	Nil	Nil	Nil	1	1	3
N.S.....	"	"	1	1	5	"	"	"	3	17	19
N.B.....	"	"	Nil	1	5	"	"	"	2	8	18
Que.....	"	"	2	Nil	1	1	2	"	2	11	11
Ont.....	1	1	3	9	12	Nil	3	"	20	43	57 ¹
Man.....	Nil	Nil	1	1	4	"	1	"	4	13	24
Sask.....	"	"	1	3	12	"	Nil	1	9	33	41
Alta. "K" Div..	"	"	2	1	8	1	"	Nil	3	27	32
N.W.T. "G" Div.....	"	"	Nil	Nil	2	Nil	"	"	Nil	2	3
B.C.....	"	"	1	"	3	"	"	"	4	14	15
Yukon.....	"	"	Nil	1	1	"	"	"	Nil	2	3
Totals.....	1	1	11	17	54	2	6	1	48	171	226

Place.	Lance Cor-por-als.	Con-stables.	Sub-Con-stables.	Special Con-stables.	Marine Section.	Total Per-sonnel.	Saddle Horses.	Team and Pack Horses	Total Horses.	Dogs.
P.E.I.....	3	19	1	4	6	39	Nil	Nil	Nil	Nil
N.S.....	12	109	2	2	185	356	"	"	"	"
N.B.....	7	76	4	3	12	136	"	"	"	1
Que.....	11	99	Nil	2	22	164	"	"	"	Nil
Ont.....	36	343	12	17	Nil	557	49	2	51	25
Man.....	9	127	Nil	7	"	191	Nil	Nil	Nil	42
Sask.....	28	412 ²	6	25	"	571	92	5	97	34
Alta. "K" Div..	17	209	1	27	"	328	6	4	10	14
N.W.T. "G" Div.....	17	30	Nil	25	"	79	Nil	Nil	Nil	285
B.C.....	6	107	1	6	2	159	45	"	45	Nil
Yukon.....	2	27	Nil	4	Nil	40	1	2	3	47
Totals.....	148	1,558	27	122	227	2,620	193	13	206	448

¹ Including 1 at the Canadian Legation at Washington.

² Including 2 trumpeters in Saskat-
chewan.

Section 9.—The Civil Service of Canada.

Organization.*—Prior to 1882, appointments to the Civil Service were made directly by the Government. In that year, a Board of Civil Service Examiners was appointed to examine candidates and issue certificates of qualification to those successful at examinations. Appointments, however, were still made by the Government of the day.

The Royal Commission of 1907, appointed to inquire into the Civil Service Act and its operation, reported in favour of the creation of a Civil Service Commission. In 1908 this body was established; it consisted of two members appointed by the Governor in Council and holding office during good behaviour, but removable by the Governor General on address of the Senate and House of Commons. The Civil Service was classified into three divisions under the Deputy Heads of Departments, each division consisting of two subdivisions, each of these having its scale of salaries. The Commission was charged with the organization of and appointments to the Inside Service (at Ottawa), certain appointments to be made after open competition and others after qualifying tests, also with holding qualifying examinations for the Outside Service (the Service apart from Ottawa) to obtain lists from which selections could be made by the various Departments. All British subjects between 18 and 35 years of age who had resided in Canada for three years were eligible to try these examinations.

In 1918 a third member of the Civil Service Commission was appointed, and by the Civil Service Act of that year the principle of appointment after open competition was applied to the Outside as well as the Inside Service. The Act also provided for the organization by the Commission of the various Government Departments, for a classification of all positions in the Service on a duties basis, for the establishment of new rates of compensation, and for the principle of promotion by merit wherever consistent with the best interests of the Service. Provision was also made for preference, in the matter of appointment to the Service, to be given to qualified applicants who had served in the Great War.

Civil Service Statistics.†—From April, 1924, a monthly return of personnel and salaries has been made by each Department to the Dominion Bureau of Statistics, according to a plan that ensures comparability between Departments and continuity in point of time. The institution of this system was preceded by an investigation back to 1912, the summary results of which are presented in Table 15.

During the war years, as will be seen from Table 15, the number of employees increased very rapidly, as a result of the enlargement of the functions of government and the imposition of new taxes, necessitating additional officials as collectors. Such new services as the Department of Pensions and National Health and the Soldier Settlement Board were also created. The maximum was reached in January, 1920, when 47,133 persons were employed; this number has since decreased to 43,224 in January, 1937. It may be added that, out of 42,780 in March, 1937 (see Table 16), 1,214 in the Income Tax Branch and 2,354 in the Department of Pensions and National Health, or 3,568 in all, were engaged in services of outstanding importance which had no existence before the War. Further, an additional 11,649 persons were, in March, 1937, employed in the Post Office Department, performing services of an industrial rather than of a governmental type, and receiving their salaries out of payments made by the public for services immediately rendered, rather than out of taxation.

* Revised by Wm. Foran, Secretary, Civil Service Commission, Ottawa.

† Revised by Col. J. R. Munro, Chief of the Finance Branch of the Dominion Bureau of Statistics, Ottawa.

The statistics of numbers of employees and of salaries, now being secured monthly, are more comprehensive than those previously published, as a result of the inclusion of various classes of employees, largely part-time, seasonal and 'fees of office' employees, who were not included in the report published in 1925. These employees are largely in the Departments of Transport, Fisheries, and Public Works. There remain, however, many persons in the "non-enumerated classes" whose numbers cannot be supplied monthly by the departmental officials but whose compensation is included in the monthly figures of expenditure on personnel, as shown in Table 16.

15.—Summary of Civil Service Employees (Permanent and Temporary) of the Government of Canada, together with Total Salaries, in the months of January of the years 1912-37, inclusive.

Year.	Employees.	Salaries.	Bonuses.	Salaries and Bonuses.
	No.	\$	\$	\$
1912.....	20,016	1,519,778	16,413	1,536,191
1913.....	22,621	1,780,703	22,569	1,803,272
1914.....	25,107	1,960,238	27,971	1,988,209
1915.....	28,010	2,268,700	32,167	2,300,867
1916.....	29,219	2,400,068	31,431	2,431,499
1917.....	32,435	2,673,767	29,167	2,702,934
1918.....	38,369	3,147,461	94,321	3,241,782
1919.....	41,825	3,552,686	557,882	4,110,568
1920.....	47,133	4,423,157	965,538	5,388,695
1921.....	41,957	4,414,669	861,973	5,276,642
1922.....	41,094	4,369,509	616,105	4,985,614
1923.....	38,992	4,268,357	463,470	4,731,827
1924.....	38,062	4,297,467	449,228	4,746,695
1925 ¹	38,645	4,473,470	166,461	4,639,931
1926.....	39,097	4,699,076	Nil	4,699,076
1927.....	39,440	4,786,615		4,786,615
1928.....	40,740	5,161,558		5,161,558
1929.....	42,038	5,428,058		5,428,058
1930.....	43,525	5,543,749		5,543,749
1931.....	45,167	5,757,554		5,757,554
1932.....	43,784	5,653,169		5,653,169
1933.....	41,920	4,775,591		4,775,591
1934.....	41,346	4,698,536		4,698,536
1935.....	41,348	4,757,045		4,757,045
1936.....	40,813	5,000,539		5,000,539
1937.....	43,224	5,190,282		5,190,282

¹ Figures for January, 1925-37, are not comparable with those for preceding Januaries, because monthly records now being published include various classes of employees not included in the historical record for the 13 years 1912-24.

Table 16, which gives statistics by Departments, with a further classification by principal branches where such are recorded, is included to give comparable figures for the latest months. In the month of March, 1937, the total number of employees in the enumerated classes was 42,836 as compared with 41,132 in March, 1936. The total expenditure on wages and salaries for all classes of employees except "non-enumerated classes" for March, 1937, was \$9,076,651 as compared with \$8,745,072 for March, 1936.

16.—Total Numbers of Civil Service Employees, by Departments and Principal Branches ("Non-Enumerated Classes" Excluded), and Total Expenditures on Salaries and Wages of all Employees ('Non-Enumerated Classes' Included), March, 1936, and March, 1937.

Department.	March, 1936.		March, 1937.	
	No.	Expenditure.	No.	Expenditure.
		\$		\$
1. Agriculture—				
Main Department.....	1,206	154,068	1,406	190,261
Experimental Farms.....	542	132,868	546	122,714
Health of Animals.....	596	95,919	681	102,030
Totals, Agriculture.....	2,344	382,855	2,633	415,005
2. Archives.....	77	11,558	69	10,458
3. Auditor-General.....	233	34,073	220	32,809
4. Canadian Radio Broadcasting Commission.....	131	21,155	1	
5. Civil Service Commission.....	147	19,929	195	22,866
6. Chief Electoral Officer.....	14	1,371	6	875
7. External Affairs—				
Prime Minister's Office.....	26	3,799 ²	23	3,036 ²
Administrative and Passport.....	59	8,842	61	9,451
The High Commissioner's Office.....	38	6,625 ²	35	5,802 ²
Director Canadian Trade Publicity.....	6	963 ²	4	438
Canadian Legation, Washington, U.S.A.....	16	4,492 ²	16	3,836 ²
Canadian Legation, Paris, France.....	10	1,899 ²	10	1,910 ²
The League of Nations.....	5	1,530 ²	6	1,655 ²
Canadian Legation, Tokyo, Japan.....	12	2,511 ²	12	2,499 ²
Totals, External Affairs.....	172	30,661 ²	167	28,627 ²
8. Finance.....	276	35,097	280	35,869
Comptroller of Treasury.....	983	133,173	982	128,795
Government Contracts Supervision Commission.....	5	790	5	794
Royal Canadian Mint.....	93	14,176	106	15,005
Superintendent of Bankruptcy.....	12	2,168	13	2,152
Tariff Board.....	30	6,778	23	6,422
9. Fisheries.....	320	63,012	309	64,814
10. Governor General's Secretary ³	12	2,535	12	2,588
11. House of Commons—				
Clerk of the House.....	262	41,052	272	44,575
Sergeant-at-Arms.....	223	21,093	248	21,351
Totals, House of Commons.....	485	62,145	520	65,926
12. Immigration and Colonization.....	615	81,778	4	4
13. Indian Affairs—				
Main Department.....	620	56,823	4	4
Educational Branch.....	409	25,842		
Totals, Indian Affairs.....	1,029	82,665	4	4
14. Insurance.....	50	9,163	49	9,274
15. Interior.....	945	145,663	4	4
16. International Joint Commission.....	6	2,497	7	2,635
17. Justice—				
Main Department.....	44	8,282	48	8,980
Clemency Branch.....	15	2,236	14	2,174
Purchasing Agent's Office.....	6	795	6	804
Penitentiaries.....	950	113,325	916	110,133
Supreme Court.....	22	3,717	22	3,728
Exchequer Court.....	12	1,957	10	1,893
Totals, Justice.....	1,049	130,312	1,016	127,712

For footnotes, see end of table, p. 1069.

16.—Total Numbers of Civil Service Employees, by Departments and Principal Branches ("Non-Enumerated Classes" Excluded), and Total Expenditures on Salaries and Wages of all Employees ("Non-Enumerated Classes" Included), March, 1936, and March, 1937—continued.

Department.	March, 1936.		March, 1937.	
	No.	Expenditure.	No.	Expenditure.
18. Labour—		\$		\$
Main Department.....	97	15,422	102	15,732
Annuities.....	35	4,014	46	4,957
Technical Education.....	2	358	1	182
Dominion Unemployment Relief.....	66	9,623	89	12,671
Totals, Labour.....	200	29,417	238	33,542
19. Library of Parliament.....	25	4,688	24	4,502
20. Marine—				
Main Department.....	3,055	333,503	5	5
Meteorological Branch.....	472	18,727		
Totals, Marine.....	3,527	352,230	5	5
21. Mines and Resources—				
Immigration.....	—	—	621	84,844
Indian Affairs.....	—	—	1,072	86,284
Lands, Parks and Forests, Surveys and Engineering.....	—	—	971	147,460
Mines and Geology.....	—	—	460	77,247
Totals, Mines and Resources.....	456*	76,922*	3,124	395,835
22. National Defence—				
General Defence Administration.....	162	21,910	161	21,770
Militia Services.....	570	49,974	619	53,873
Naval Services.....	152	35,249	156	31,053
Air Services.....	117	13,933	250	25,802
Military Topographic Surveys.....	20	4,042	20	3,939
Royal Military College.....	78	10,325	85	11,016
Dominion Arsenal, Quebec, inc. Ammun. Inspection.....	44	24,201	45	38,539
Totals, National Defence.....	1,143	159,634	1,336	185,992
23. National Research Council.....	144	29,667	171	29,866
24. National Revenue—				
Main Department.....	4,266	600,835	4,307	611,758
Income Tax Division.....	1,188	159,827	1,214	159,120
Totals, National Revenue.....	5,454	760,662	5,521	770,878
25. Pensions and National Health—				
Pensions.....	1,785	210,889	1,799	212,909
Canadian Pension Commission.....	227	36,718	225	37,094
Health.....	268	44,513	265	48,020
Pensions Appeal Court.....	10	3,076	12	3,257
Veterans' Assistance Commission.....	—	—	53	6,694
Totals, Pensions and National Health.....	2,290	295,196	2,354	307,974
26. Post Office—				
Civil Government.....	867	107,280	887	109,635
Outside Service.....	9,980	4,334,392	10,762	4,620,385
Totals, Post Office.....	10,847	4,441,672	11,649	4,730,020
27. Privy Council.....	17	3,455	18	3,603
28. Public Printing and Stationery.....	617	99,015	622	104,653
29. Public Works—				
Civil Government.....	246	42,196	250	42,016
Outside Service.....	3,436	343,702	3,610	331,058
Totals, Public Works.....	3,682	385,898	3,860	373,074

For footnotes, see end of table, p. 1069.

16.—Total Numbers of Civil Service Employees, by Departments and Principal Branches ("Non-Enumerated Classes" Excluded), and Total Expenditures on Salaries and Wages of all Employees ("Non-Enumerated Classes" Included), March, 1936, and March, 1937—concluded.

Department.	March, 1936.		March, 1937.	
	No.	Expenditure.	No.	Expenditure.
		\$		\$
30. Railways and Canals.....	1,045	200,329	5	5
Board of Railway Commissioners.....	90	20,393	5	5
31. Royal Canadian Mounted Police.....	114	222,915	108	221,329
32. Secretary of State (including Patents and Copyrights)...	294	43,443	312	45,259
33. Senate.....	139	17,471	146	18,195
34. Soldier Settlement Board.....	335	50,020	325	46,302
35. Trade and Commerce—				
Headquarters and Miscellaneous Branches.....	65	9,775	66	10,158
Board of Grain Commissioners.....	691	111,998	649	102,500
Dominion Bureau of Statistics.....	446	46,516	705	65,932
Weights and Measures.....	123	17,509	136	18,520
Electricity and Gas.....	98	16,001	101	16,465
Commercial Intelligence Service.....	100	45,299	97	43,793
Motion Picture Bureau.....	26	4,137	26	4,097
Exhibitions.....	15	10,299	15	7,753
Canadian Government Elevators.....	121	16,957	72	13,134
Totals, Trade and Commerce.....	1,685	278,491	1,867	282,352
36. Transport—				
Marine Services.....	—	—	3,433	360,070
Railways and Canals.....	—	—	1,030	173,360
Board of Railway Commissioners.....	—	—	86	17,219
Totals, Transport.....	—	—	4,549	550,649
Grand Totals.....	41,132	8,745,072	42,836	9,076,651

¹ The Canadian Radio Broadcasting Commission became the Canadian Broadcasting Corporation on Nov. 2, 1936, and its employees are no longer accounted Civil Servants.

² Including living allowances.

³ Salaries of A.D.C.'s are included, but not their number.

⁴ Included with Department of Mines and Resources after 1936.

⁵ Included with Department of Transport after 1936.

⁶ Includes extra staff under the Public Works Construction Act, 1935; the Department of Mines and Resources.

Section 10.—Supervision of Race Track Betting.

By an amendment to Sec. 235 of the Criminal Code, passed in 1920, the supervision of race track betting, under the pari-mutuel system, was placed in the hands of the Minister of Agriculture. The actual supervision is carried out by officers of the Royal Canadian Mounted Police and operated for the first time during the racing season of 1921. Statistics are available from the year 1924 and are shown in Table 17 for the Dominion as a whole, while Table 18 shows the operations by provinces for the year 1936.

17.—Race Track Betting in Canada, fiscal years 1924-36.

Fiscal Year.	Number of Associations.	Number of Days Racing.	Amounts Wagered.	Pari-Mutuel Receipts Retained.	Prize Money.
			\$	\$	\$
1924.....	30	354	52,600,633	3,496,891	2,023,665
1925.....	33	344	49,867,765	3,359,708	1,925,735
1926.....	32	322	44,346,672	3,018,358	1,807,780
1927.....	31	354	47,915,828	3,278,179	2,034,587
1928.....	32	350	45,960,928	3,154,644	1,973,730
1929.....	30	335	45,580,845	3,104,456	1,886,800
1930.....	30	332	36,007,146	2,657,059	1,802,095
1931.....	30	326	33,377,786	2,379,558	1,564,945
1932.....	29	315	28,695,438	2,066,672	1,285,563
1933.....	28	324	25,137,598	1,831,411	1,147,871
1934.....	26	295	20,976,498	1,548,848	986,128
1935.....	27	321	20,891,669	1,534,739	1,065,835
1936.....	27	300	20,951,710	2,182,112	1,002,795

18.—Race Track Betting in Canada, by Provinces, fiscal year ended Mar. 31, 1936.

Province.	Number of Associ- ations.	Number of Days Racing.	Amounts Wagered.	Pari- Mutuel Receipts Retained.	Prize Money.
			\$	\$	\$
Nova Scotia.....	1	4	5,792	3,359	1,500
Quebec.....	4	56	1,565,744	209,128	119,600
Ontario.....	9	113	13,319,756	1,311,793	528,800
Manitoba.....	2	28	2,025,655	209,833	99,500
Saskatchewan.....	2	12	285,982	45,013	21,750
Alberta.....	5	31	835,354	103,518	60,330
British Columbia.....	4	56	2,913,427	299,468	171,315
Totals.....	27	300	20,951,710	2,182,112	1,002,795

Section 11.—The Tariff Board.*

The Tariff Board was constituted by Act of Parliament in 1931 (c. 55, 21-22 Geo. V). It consists of three members, a Chairman, a Vice-Chairman and a member, and a Secretary, all appointed by the Governor in Council.

The constitution and duties of the Board are defined in two parts of the Act of 1931.

Under Part I, the Board makes inquiry into and reports upon any matter on which the Minister of Finance desires information, in relation to any goods which, if brought into Canada or produced in Canada, are subject to or exempt from duties of customs or excise. The investigation into any such matter may include inquiry as to the effect which an increase or decrease of the existing rate of duty upon a given commodity might have upon industry or trade, and the extent to which the consumer is protected from exploitation.

It is also the duty of the Board to inquire into any other matter or thing in relation to the trade or commerce of Canada which the Governor in Council sees fit to refer to the Board for inquiry and report.

The Act provides that reports shall be made to the Minister of Finance, and tabled in the House of Commons. The principal commodities reported on are: wool textiles; boots and shoes; jute yarns and twines; fruits and vegetables; hookless fasteners (zippers); wooden doors; silver-bearing articles (toiletware); dextrines; rabbit skins; brass, copper and nickel-silver commodities; boiler tubes; skelp; coco-mats and mattings; hats and hoods; biscuits; cork boards, slabs and planks; crude petroleum and its derivatives; automotive industry; artificial silk yarns, cotton yarns and fabrics. In the year 1937 reports were made on plastics of all kinds; furniture; steel wool; the automotive industry; certain sporting goods, etc.

Part II of the Act empowers the Board to hear and decide appeals from rulings made by the Department of National Revenue with respect to fair market value of goods for duty purposes, erroneous appraisals, and the rate of duty applicable to any class of goods. Under Order in Council the Board has authority and power, (1) to declare or find with respect to any importation whether any goods are "of a class or kind made or produced in Canada"; (2) to review the value for duty applied by the Customs to new or unused goods under provisions of Sec. 36 of the Customs Act and make its findings with regard thereto; (3) to determine and declare whether any and, if so, what drawback of Customs duty is payable under the provisions of Schedule B of the Customs Tariff. Findings of the Board on Appeals are published in the *Canada Gazette*.

* Revised by James R. MacGregor, Secretary, Tariff Board.

Section 12.—Dominion Trade and Industry Commission.*

The Dominion Trade and Industry Commission was constituted by Act of Parliament in 1935 (c. 59, 25-26 Geo. V). It consists of three Commissioners, one of whom is the Chief Commissioner and another the Assistant Chief Commissioner. The Act provides that for the time being the members of the Tariff Board (see Section 11) shall be the Commissioners, and the Chairman and Vice-Chairman of the Tariff Board shall be the Chief Commissioner and Assistant Chief Commissioner, respectively.

Duties of the Commission consist of investigating and recommending the prosecution of offences against Acts of Parliament relating to commodity standards; preparation of draft specifications for commodity standards; application of the national trademark "Canada Standard" to commodities which conform to specifications established under any Act of Parliament; investigation of complaints respecting unfair trade practices, and recommending the prosecution of offences against any Dominion law prohibiting unfair trade practices; the convening of conferences for the purpose of considering commercial practices prevailing in industry, and determining what practices are unfair or undesirable in the interest of the industry or the public.

Section 13.—The National Employment Commission.

An account of the establishment of the National Employment Commission is given at p. 1052 of the 1937 Year Book. The Commission presented its final report on Jan. 26, 1938 and was dissolved on Feb. 1, 1938. An account of the work carried out by the Commission will be found at p. 778-779 of this volume.

Section 14.—Other Miscellaneous Administration.

In previous editions of the Year Book this chapter has been brought to a close with outlines of Dominion Government administration as follows: the International Joint Commission; the Geodetic Survey of Canada; the Topographical Survey; the Dominion Observatories.

The three latter services were, up to the end of 1936, administered by the Department of the Interior but, as will be seen from the outline of Dominion legislation (under the heading "Civil Service") p. 1065, the newly-organized Department of Mines and Resources, which came into effect on Dec. 1, 1936, absorbed the old Departments of Mines, Interior, Indian Affairs, and Immigration. The Geodetic Survey and the Dominion Observatories administrations are continued as Divisions of the Surveys and Engineering Branch of the new Department, but topographical survey work has been re-organized, the mapping work having been combined with the Hydrographic Service as a Division of the Surveys and Engineering Branch, and the topographical survey work taken over by the Bureau of Geology and Topography of the Mines and Geology Branch.

The purpose of establishing the above-mentioned new Departments was to correlate the efforts of the staffs of such older Departments as had, in the course of time, acquired overlapping features, or which could be more economically administered under one head without impairing the usefulness of necessary services.

* Revised by James R. MacGregor, Secretary, Dominion Trade and Industry Commission.

CHAPTER XXIX.—SOURCES OF OFFICIAL STATISTICAL AND OTHER INFORMATION RELATIVE TO CANADA.

The chief source of information on the current state of the country is the Dominion Bureau of Statistics, organized as the central statistical bureau for Canada, and described in the first part of this chapter.

The second section of the chapter contains a list of the Acts of Parliament administered by the several Departments of the Dominion Government, and the third section a bibliography of the publications of these Departments. This is followed, in Section 4, by a bibliography of the publications of Provincial Governments.

Section 1.—The Dominion Bureau of Statistics.*

The Dominion Bureau of Statistics was set up by statute in 1918 as a central statistical department for Canada (8-9 Geo. V, c. 43).† The Act was a consolidation of all previous statistical legislation and was based on the report of a Commission on Statistics, appointed in 1912, which recommended (a) a series of specific reforms and enlargements in Canadian statistics, and (b) a policy of statistical co-ordination for the Dominion, under central direction. In 1915, following the recommendations in this report, the office of Dominion Statistician was created.

As first established‡ the Bureau included, by transfer or absorption, the following divisions: (1) the Census and Statistics Office (covering the census, and also agriculture, general manufactures, and judicial statistics), (2) Fisheries Statistics, (3) Mining Statistics, (4) Forestry Statistics, (5) Dairying and Fruit Statistics, (6) Water- and Electric-Power Statistics, (7) the Railways and Canals Statistical Branch of the Department of Railways and Canals, (8) the Trade Statistical Branch (Exports and Imports), (9) Grain Trade Statistics, (10) Live-Stock Statistics, (11) Prices Statistics, and (12) Employment Statistics. In addition four new branches were created, dealing respectively with Public Finance, Internal Trade, Vital Statistics, and Education.

Since its organization in 1918, the Bureau has created out of these many heterogeneous units a unified, nation-wide, statistical system in which the correlation of the several subjects and their interpretation from a comprehensive national viewpoint has been the primary objective. By means of Dominion-Provincial statistical conferences held from time to time, a useful degree of co-operation and uniformity of statistical classification and method has been achieved and progress along these lines continues. These main advantages of statistical centralization have not only been substantially attained, but the treatment of statistics, not merely as aggregations of figures, but as primary data from which complex social and economic phenomena may be interpreted, has been emphasized. This view of a true national statistic as revealing the controlling economic forces which operate and their inter-

* A more complete account of the formation and activities of the Bureau of Statistics will be found on pp. 961-964 of the 1922-23 Year Book.

† Consolidated as the Statistics Act (c. 190, R.S.C., 1927).

‡ See the first Annual Report of the Dominion Statistician, for the fiscal year ended Mar. 31, 1919.

play, and the value of such a statistic in administrative planning along national lines, involves, of course, an added function of the Bureau, *viz.*, its usefulness as a national laboratory for economic and social research. This is a development which, as yet, is in its infancy but the foundation of such a service, comparable with the increasing importance of Canada in the economic and political world, has already been laid.

While primarily serving the Government, the Bureau realizes that in a democratic community every citizen is a part of the Government and should be well informed regarding the social and economic conditions of his country as a whole, as well as respecting the part of it that comes under his own eyes. Accordingly, the Bureau furnishes to all applicants answers to all manner of questions on all sorts of topics, either directly or through the columns of the press. In particular, it supplies to business men of all classes information regarding business conditions, such as the production, imports, exports, prices, stocks, etc., of all kinds of commodities, in order to enable them to direct their operations more effectively to their own greater advantage and to the greater advantage of Canada. Arrangements have been completed whereby special tabulations may be made, or other investigations carried out at a fee based only on the extra clerical costs to the Bureau.

As now organized, the Branches of the Dominion Bureau of Statistics are: I. Administration; II. Demography—Census and Vital Statistics; III. Agricultural Statistics; IV. Fisheries, Furs, Animal and Dairy Products; V. Mining, Metallurgical and Chemical; VI. Forestry and Allied Industries; VII. General Manufactures. VIII. External Trade (Imports and Exports); IX. Internal Trade; X. Transportation and Public Utilities; XI. Financial Statistics; XII. Judicial Statistics; XIII. Education Statistics; XIV. Census of Institutions; XV. General Statistics. An organization chart showing the relationship of the Branches and the divisions of their work was published at pp. 1144-1145 of the 1934-35 Year Book.

Publications.—Items in the vote of the Bureau, passed by Parliament each year, provide limited funds for the printing and processing of reports and bulletins. Reports printed from type are set up by the King's Printer, but the Bureau itself operates three contact printing presses and all processed reports and bulletins are completely printed as well as published by the Bureau of Statistics.

The present policy with regard to the distribution of publications is based on sales to the public at actual cost of paper and presswork only; compilation, editing, and other overhead costs are not included. The object is to extend the service to the public as widely as possible and so spread the compilation and overhead which are the big items in total costs. A special subscription rate of \$20 per year is made to firms and individuals listed to receive the 'all publications' service. The charge entitles the payer to receive a copy of each publication as issued, with the exception of news bulletins. Other special rates are set for series of publications in related groups; these are referred to in the respective sections of the list following.

Applications for reports should be sent to the Bureau of Statistics; they should indicate the individual publication or series of reports in which the applicant is interested and include the necessary remittance in the form of a cheque or money order made payable to the Receiver-General of Canada, Ottawa.

ADMINISTRATION—

Annual Report of the Dominion Statistician. (Included in the Annual Report of the Department of Trade and Commerce, *Price 25 cents.*)

POPULATION—

I. CENSUS—

(A) Report of the Seventh Census of Canada, 1931:—

- Vol. I. General—Administrative Report of the Seventh Census followed by a summary of the leading facts of the Censuses of Population and Agriculture, Institutions, Merchandising and Service Establishments, etc., and cross-analyses relating thereto. The Appendix gives a complete bibliography of census materials and reproduces the more salient figures for specified years, chronologically arranged, back to 1605. The volume also contains a series of life tables for the Dominion and each province. *Price, Cloth \$1.50, Paper \$1.*
- Vol. II. Population by Local Subdivisions—Conjugal condition, racial origin, religion, birthplace, year of immigration, language, literacy, school attendance, etc. *Price, Cloth \$1.50, Paper \$1.*
- Vol. III. Ages of the People—Classified by sex, conjugal condition, racial origin, religion, birthplace, language, literacy, year of immigration, naturalization, etc. *Price, Cloth \$1, Paper 75 cents.*
- Vol. IV. Birthplace, Racial Origin and Year of Immigration of the People—Classified and cross-classified by conjugal condition, naturalization and citizenship, religion, language, literacy, school attendance. *Price, Cloth \$1, Paper 75 cents.*
- Vol. V. Earnings of Wage-Earners, Dwellings, Households, Families, Blind and Deaf-Mutes—Cross-classified by birthplace, conjugal condition, year of immigration, naturalization and citizenship, racial origin, religion, language, literacy, school attendance. *Price, Cloth \$1, Paper 75 cents.*
- Vol. VI. Unemployment—Classified by industry, occupation, cause, age, sex, conjugal condition, period of idleness, birthplace, racial origin, year of immigration. *Price, Cloth \$1, Paper 75 cents.*
- Vol. VII. Occupations and Industries—Cross-classified by birthplace, race, age, sex, etc. *Price, Cloth \$1, Paper 75 cents.*
- Vol. VIII. Agriculture—Agricultural population, farm holdings and land area, tenure, value of farm property and farm products, acreage and yields of crops, live stock, mortgage indebtedness and farm expenses, farm machinery, facilities and roads, co-operative marketing, etc. *Price, Cloth \$1, Paper 75 cents.*
- Vol. IX. Institutions—Hospitals for the Sick—Type, bed capacity, facilities, movement of patient population, personnel, capital investment, maintenance, receipts and expenditures, etc.; Mental Hospitals—Movement of patient population and their psychoses, age, nativity, racial origin, economic condition, conjugal condition, environment, literacy, religion, administration and personnel, etc.; Charitable and Benevolent Institutions—Type, movement of population, finances, inmates, age, sex, administration and personnel, etc.; Penitentiaries and Corrective and Reformatory Institutions—Inmates, offences, sentences, age, birthplace, citizenship, racial origin, previous employment, environment, educational status, conjugal condition, social habits, overseas service, administrative staff, receipts and expenditures. *Price, Cloth \$1, Paper 75 cents.*
- Vols. X and XI. Merchandising and Service Establishments—Retail merchandise trade cross-classified by kind of business, type of operation, size of business, employees, salaries and wages, capital investment, rent and other operating expenses, credit, etc.; wholesale trade cross-classified by type of establishment, kind of business, operating expenses, etc.; with special reports on retail trade in urban and rural areas, chain stores, food retailing, drug stores, hotels, moving picture theatres, co-operative marketing and purchasing, etc. *Price, Cloth \$1, Paper 75 cents each Volume.*
- Vols. XII and XIII. Census Monographs—Consisting of a series of studies of such outstanding Canadian problems as: Growth of Population in Canada; Age Distribution of the Canadian People; Fertility of the Population; Origin, Language, Birthplace and Nationality of the Canadian People; Illiteracy and Educational Status; The Racial and Urban Composition of the Canadian Population since Confederation; The Canadian Family—Its Composition, Size and Condition from the Earliest Times; Housing and Rentals; Dependency; The Evolution and Present-Day Significance of the Canadian Occupational Structure; Unemployment; The Population Basis of Agriculture; Official Life Tables; Graduated Tables; Probabilities Referring to Occupations, Earnings, etc. (*In course of preparation.*) *Price, Cloth \$1, Paper 75 cents.*

POPULATION—continued.

I. CENSUS—continued.

(A) Report of the Seventh Census of Canada, 1931—concluded.

AGRICULTURE.—

- Prince Edward Island—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*
- Nova Scotia—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*
- New Brunswick—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*
- Quebec—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*
- Ontario—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*
- Manitoba—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*
- Saskatchewan—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*
- Alberta—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*
- British Columbia—Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products, *Price 25 cents.*

(B) Bulletins of the Seventh Census of Canada, 1931:—

- (1) POPULATION.—*Final Bulletins.*—(V) Saskatchewan. (VI) Alberta. (XI) Rural and Urban Population for Canada and Provinces. (XIII) Cities, Towns and Villages in Canada, by Provinces. (XVI) Ages, by Provinces. (XIX) Radio Sets in Canada, 1931. (XXVI) Age Distribution by Single Years of Age for Canada, by Provinces, 1931. (XXVII) Immigrant Population Classified by Sex, Country of Birth, Province of Residence, Years of Arrival in Canada, and Citizenship of the Foreign Born, 1931. (XXVIII) Gainfully Employed Ten Years of Age and Over, Classified According to Occupation and Sex for Cities of 30,000 and Over, 1931. (XXIX) Birthplace of the Population Classified According to Nativity of Parents for Canada and Provinces, 1931. (XXX) Canadians and other Nationals. (XXXI) Gainfully Employed Ten Years of Age and Over for Canada and Provinces, 1931. (XXXII) Literacy, Language Spoken, and Conjugal Condition of the Population Ten Years of Age and Over, 1931. (XXXIII) Earnings Among Wage-Earners for Canada and Provinces, 1931. (XXXIV) Ages of the Gainfully Employed Ten Years of Age and Over, for Canada and Provinces, 1931. (XXXVII) Age Distribution by Five-Year Age Groups for Cities, Towns and Villages of 5,000 Population and Over, 1931. (XXXVIII) Population of the Municipal Wards of Montreal City by Quinquennial Age Groups, Conjugal Condition, Birthplace, Racial Origin, Religion, School Attendance and Literacy, by Sex, 1931. (XXXIX) Houses and Dwellings. (XL) Population of the Municipal Wards of the Cities of Toronto, Vancouver, Winnipeg, Hamilton, Quebec, and Ottawa by Quinquennial Age Groups, Conjugal Condition, Birthplace, Racial Origin, Religion, School Attendance and Literacy, by Sex, Census of 1931. (XLI) Orientals, Ten Years of Age and Over, Gainfully Employed by Race, Occupation and Sex, in British Columbia, 1931. (XLII) Persons Speaking Gaelic. (XLIII) Blind. (XLIV) Deaf Mutes. (XLV) Racial Origins of Gainfully Occupied, Ten Years of Age and Over for Canada and the Provinces. (XLVI) Birthplaces of Gainfully Occupied Ten Years of Age and Over, for Canada and the Provinces, 1931. (XLVII) Conjugal Condition of Gainfully Occupied Females, Fifteen Years of Age and Over, for Canada and the Provinces, 1931. Distribution of Occupations by Industry. Unemployment Among Wage-Earners—(I) Saint John, N.B.; (II) Winnipeg, Man.; (III) Kitchener, Ont.; (IV) Ottawa, Ont.; (V) Vancouver, B.C.; (VI) Hamilton, Ont.; (VII) Calgary, Alta.; (VIII) Toronto, Ont.; (IX) Montreal, Que. Population 1871-1931. Age distribution. Earnings of Wage-earners.
- (2) AGRICULTURE.—*Final Bulletins.*—Animal Products on Farms, by Counties—(VII) Ontario; (VIII) Quebec; (IX) British Columbia. Live Stock on Farms, by Counties—(X) Prince Edward Island; (XI) Nova Scotia; (XII) New Brunswick; (XIII) Manitoba; (XIV) Saskatchewan; (XV) Alberta; (XVI) British Columbia; (XVII) Ontario; (XX) Stock Sold Alive, Stock Slaughtered, Young Animals Raised, 1930, and Pure-Bred Live Stock on Farms, 1931, by Counties or Census Divisions. (XXIV) Forest Products of Farms, by Counties or Census Divisions, 1930. (XXV) Condition of Farm Land, by Counties or Census Divisions, 1931. (XXVI) Area of Field Crops, by Counties or Census Divisions, 1931.

POPULATION—concluded.**I. CENSUS—concluded.****(C) *Bulletins of the Quinquennial Census of the Prairie Provinces, 1936:—***

Preliminary Bulletins.—(I) Population of Certain Cities, Towns and Villages. (II) Population of Certain Cities, Towns and Villages. (III) Population of Certain Cities, Towns and Villages and Electoral Districts. (IV) Population of Certain Electoral Districts, Towns and Villages. (V) Number of Occupied and of "Vacant" or "Abandoned" Farms in Certain Electoral Districts. (VI) Population of Certain Electoral Districts and Cities, Towns and Villages. (VII) Area under Field Crops in 1936 in Certain Electoral Districts. (VIII) Population of Certain Electoral Districts and Cities, Towns and Villages. (IX) Population of Rural Municipalities in the Provinces of Manitoba, Saskatchewan, and Alberta. (X) Population of Certain Electoral Districts and Cities, Towns and Villages. (XI) Number of Occupied and of "Abandoned" or "Vacant" Farms in Certain Electoral Districts. (XII) Population of Certain Electoral Districts, Rural Municipalities, Cities, Towns and Villages. (XIII) Population of Electoral Districts in the Provinces of Manitoba, Saskatchewan, and Alberta. (XIV) Preliminary Announcement of Unemployment and Employment among Wage-Earners, in Cities and Towns of 5,000 Population and Over. (XV) Area under Field Crops in the Prairie Provinces, 1936 and 1931. (XVI) Number of Live Stock on Farms on June 1, 1936, in the Prairie Provinces. (XVII) Preliminary Announcement of Unemployment and Employment among Wage-Earners in Urban Centres of 1,000 to 5,000 Population. (XVIII) Preliminary Announcement of Unemployment and Employment among Wage-Earners in the provinces of Manitoba, Saskatchewan, and Alberta. (XIX) Number of Farms in the Prairie Provinces by Census Divisions. *Final Bulletins.*—(XX) Population by Townships, Rural and Urban, by Census Divisions, Age, Sex, Conjugal Condition, Birthplace, Racial Origin, Official Language, Immigration, School Attendance, Literacy, for cities of 10,000 population and over, *Price 25 cents.* (XXI) Occupations and Industries of Gainfully Occupied for Cities of 10,000 Population and Over, *Price 25 cents.* (XXII) Preliminary Report on Agriculture for the Province of Manitoba, *Price 15 cents.* (XXV) Preliminary Report on Agriculture for the Province of Saskatchewan, *Price 15 cents.* (XXVIII) Preliminary Report on Agriculture for the Province of Alberta, *Price 15 cents.* *Final Bulletins.*—(XXIII) Population Classifications by Provinces, *Price 25 cents.* (XXIV) Unemployment Among Wage-Earners for Cities of 10,000 Population and Over, *Price 25 cents.* (XXVI) Earnings and Employment among Wage-Earners for Cities of 10,000 Population and Over, *Price 25 cents.* (XXVII) Occupations and Industries of Gainfully Occupied for the Provinces of Manitoba, Saskatchewan and Alberta, *Price 25 cents.* (XXIX) Unemployment among Wage-Earners for the Provinces of Manitoba, Saskatchewan and Alberta, *Price 25 cents.* (XXX) Unemployment and Earnings among Wage-Earners on Relief and Not on Relief for Cities of 30,000 Population and Over, *Price 25 cents.* (XXXI) Earnings and Employment among Wage-Earners for the Provinces of Manitoba, Saskatchewan and Alberta, *Price 25 cents.* (XXXII) Earnings of Wage-Earner Heads by Tenure and Size of Family for Cities of 10,000 Population and Over, *Price 25 cents.*

(D) *Reports of the Census of Institutions:—*

(1) Annual Report on Mental Institutions, 1935, *Price 25 cents.* (2) Directory of Hospitals, 1935, *Price 50 cents.* (3) Report on Penitentiaries and Reformatories, 1936, *Price 25 cents.* (4) Report on Charitable Institutions, 1936, *Price 25 cents.* (5) Report on Tuberculosis Institutions, 1936, *Price 25 cents.*

II. INTERCENSAL ESTIMATES OF POPULATION.**III. VITAL STATISTICS.**

Annual Report on Vital Statistics of Canada by Provinces and Municipalities, *Price \$1*; Preliminary Annual Report on Vital Statistics of Canada, *Price 25 cents*; Preliminary Quarterly Report on Vital Statistics of Canada; Monthly Report of Births, Deaths, and Marriages registered in Cities; Special Report on Contributory Causes of Death, 1926; Order of Birth in the Registration Area of Canada, 1925; Manual of the International List of Causes of Death, Revision of 1929 (limited edition); Special Report on Mortality in Canada from Cerebral Hæmorrhage and Certain Diseases of the Heart, Arteries and Kidneys, 1921-32; Special Report on Mortality in Canada According to Place of Residence, 1930-32; Special Report on Mortality from Tuberculosis in Canada According to Place of Residence, 1930-32; Special Report on Births in Canada According to Place of Residence of Mother, 1930-32; Special Report on Mortality in Canada, 1921-32; Handbook on Death Registration and Certification, containing International List of Causes of Death (special distribution); Special Report on Mortality in Canada, 1921-35, *Price 25 cents*; Special Report on Occupational Mortality in Canada, 1931-32, *Price 25 cents*; Special Report on Deaths in Canada, Classified According to Residence of Decedents, 1935 (Parts I and II), *Price, each part, 25 cents.*

PRODUCTION—

I. ANNUAL SURVEY OF PRODUCTION.

Including and differentiating gross and net—(1) Primary Production (agriculture, forestry, fisheries, trapping, mining, and electric power), (2) Secondary Production, or General Manufactures, Custom and Repair, and Construction, and (3) Provincial and Per Capita Analyses, Explanation of Method, *Price 25 cents*.

II. AGRICULTURE.

- (1) *Agricultural Production*—Monthly Bulletin of Agricultural Statistics with Index, *Price \$1 per year*. (The official record of current statistical data relating to agriculture. Contains reports on crop conditions, prices, weather, etc.—estimates of areas, yields, quality, and value of field crops—value of farm lands—wages of farm help—number and values of farm live stock and poultry—dairying—eggs—tobacco—apiculture—maple products—clover and grass seed—miscellaneous crops—stocks of grain—annual summary of value of agricultural production—index numbers of agricultural prices, production, and values—international agricultural statistics.) Table of Contents and Index of Monthly Bulletin of Agricultural Statistics. Reprinted from the Monthly Bulletin of Agricultural Statistics: (a) Canadian Trade in Farm Products, 1926-27; (b) The Fertilizer Trade in Canada; (c) Farm Expenditures in Alberta and Saskatchewan, 1934; (d) Fruit Statistics of Canada, 1926-35. Advance Summaries of Agricultural Statistics. Telegraphic Crop Reports (between June 1 and Sept. 1, weekly for the Prairie Provinces and every two weeks for the rest of Canada). Agricultural Statistics by Counties and Crop Districts. Advance Summaries on Fruit Conditions, Yields, etc., *Price \$2 per year*. Annual Statistics of Fruit, Nursery Stock and Floriculture. Handbook of Instructions to Crop Correspondents, and Summary of Annual Agricultural Statistics. *Mimeographed Reports, Annual*.—Field Crop Acreages and Live Stock Numbers at June 1. Crop Reports—released on dates listed in the Crop-Reporting Program covering: (a) Intentions to Plant Field Crops; (b) Winter-killing and Spring Condition of Fall Wheat, Fall Rye, and Hay and Clover Meadows; (c) Progress of Spring Seeding; (d) Acreage, Condition, Yield, Stocks on Hand, and Value of Field Crops, *Price \$2 per year*. Fruit and Vegetables—condition reports, estimates of production and value, *Price \$1 per year*. (See also Census of Agriculture under "Population".)
- (2) *Grain and Grain Products*—(a) Annual Report on the Grain Trade of Canada, *Price 50 cents*; (b) Preliminary Report on the Grain Trade of Canada, *Price 25 cents*; (c) Monthly Review of the Wheat Situation, *Price \$1 per year*; (d) Canadian Grain Statistics (weekly report on grain supplies and movements), *Price \$2 per year*; (e) Canadian Milling Statistics (monthly), *Price 50 cents per year*; (f) List of Mills with Capacity, *Price 50 cents*; (g) The Grain Situation in Argentina (monthly), *Price \$1 per year*; (h) The Production and Distribution of Canadian Grains and Seeds—(1) Barley, (2) Oats, (3) Rye, (4) Flaxseed; (i) World Trade in Barley; (j) World Shipments of Wheat and Wheat Flour, 1926-27 to 1931-32; (k) World Trade in Wheat, *Price 25 cents*; (l) The Routing of Canadian Grain for Export; (m) Salient Features in the Grain Situation in Canada; (n) Trends in World Wheat Acreage, with graphic appendix.
- (3) *Live-Stock and Animal Products*—(a) Annual Report on Live-stock and Animal Products Statistics, *Price 25 cents*; (b) Monthly Reports on Cold Storage Holdings in Canada (1) Meat and Fish, *Price \$1 per year*, (2) Dairy and Poultry Products, *Price \$1 per year*, (3) Apples, Pears, Small Fruits, and Vegetables, *Price 50 cents per year*; (c) Monthly Reports on Stocks of Butter, Cheese, and Eggs in the Principal Cities of Canada, *Price 50 cents per year*; (d) Monthly Review of Dairy Production, *Price \$1 per year*; (e) Annual Estimates of the Consumption of Meats, Poultry, Butter, Cheese, and Eggs; (f) Annual Report on Dairying Statistics of Canada, *Price 25 cents*; (g) Annual Survey of Live Stock and Poultry at Dec. 1, *Price 25 cents*; (h) Annual Summary of Cold Storage Holdings, *Price 25 cents*; (i) The Dairy Situation in Canada (quarterly), *Price \$1 per year*.
- (4) *Other*—Monthly Report on Raw and Refined Sugar (visible supply, meltings, shipments, exports and imports), *Price \$1 per year*. Annual Summary of Sugar Reports. Annual Report on the Agricultural Situation and Outlook (published in co-operation with the Department of Agriculture) with supplements as follows: (a) The Potato Situation in Eastern Canada, 1935; (b) Production Trends and Policies in Agriculture, 1936; and (c) Charts, 1937. Report of the Conference on Agricultural Statistics, Ottawa, Mar. 30-Apr. 2, 1936.

PRODUCTION—continued.

III. FURS.

Annual Report on Fur Farms, *Price 35 cents*. List of Companies, Firms and Individuals, Engaged in Fur Farming in Canada, *Price \$5*. Advance Bulletin of Statistics of the Production of Raw Furs, *Price 10 cents*. Annual Bulletin of the Production of Raw Furs (comprising the pelts taken by trappers and those sold from fur farms), *Price 25 cents*.

IV. FISHERIES.

Annual Report of Fisheries Statistics, *Price 35 cents*. Advance Bulletins of Fish Caught and Marketed, by Provinces: Prince Edward Island, *Price 10 cents*; Nova Scotia, *Price 15 cents*; New Brunswick, *Price 15 cents*; Quebec, *Price 15 cents*; Ontario, The Prairie Provinces, and Yukon, *Price 15 cents*; British Columbia, *Price 15 cents*; Canada, *Price 25 cents*.

V. FORESTRY.

Annual Summary of the Value, etc., of Forest Production (includes operations in the woods for sawmills, shingle mills, pulp and paper mills, etc., production of mining timber, production of poles and cross ties, and farm production of firewood, posts, etc.), *Price 15 cents*.

[See also Reports on Manufactures of Forest Products listed under "Manufactures", Section VII, Subsection (5).]

VI. MINERAL PRODUCTION (MINING AND METALLURGY).

(1) *General*—(a) Annual Report on the Mineral Production of Canada, *Price 50 cents*; (b) Preliminary Reports (semi-annual) on the Mineral Production of Canada, *Price 25 cents*; (c) Monthly Reports on Leading Minerals—reports on gold, silver, lead, zinc, cobalt, nickel, copper, petroleum, gypsum, coal, cement, lime, clay, salt, asbestos, feldspar, etc., *Yearly subscription 50 cents per report*; (d) Preliminary Estimate of Canada's Mineral Production, *Price 10 cents*.

(2) *Coal*—(a) Annual Report on Coal Statistics for Canada, *Price 25 cents*; (b) Monthly Summary Report on Coal and Coke Statistics for Canada, *Price 50 cents per year*; (c) Quarterly Report on Coal and Coke Statistics for Canada, *Price 50 cents per year*.

(3) *Annual Bulletins on Mining—Metals*—The Gold-Mining Industry in Canada (including alluvial gold mining, auriferous quartz mining, copper-gold-silver mining, and tables showing Canadian and world production of gold), *Price 25 cents*. The Silver-Mining Industry in Canada (including silver-cobalt-arsenic mining, silver-lead-zinc mining, and tables showing Canadian and world production of arsenic, cobalt, lead, silver, and zinc), *Price 25 cents*. The Nickel-Copper Mining, Smelting and Refining Industry (including Canadian and world production of nickel), *Price 25 cents*. The Copper-Mining Industry (including Canadian and world production of copper), *Price 10 cents*. Metals of the Platinum Group, *Price 10 cents*. The Production of Miscellaneous Metals (including aluminium, antimony, barium, beryl, bismuth, cadmium, calcium, chromite, lithium, magnesium, manganese, mercury, molybdenite, radium, selenium, tin, titanium, tungsten), *Price 15 cents*. The Non-Ferrous Smelting and Refining Industry, *Price 15 cents*. The complete *Mining Series of Reports (with the exception of Coal)*, *Price \$4*.

Non-Metals—Abrasives, *Price 15 cents*; *Asbestos*, *Price 10 cents*; *Feldspar and Quartz*, *Price 10 cents*; *Gypsum*, *Price 10 cents*; *Iron Oxides*, *Price 10 cents*; *Mica*, *Price 10 cents*; *Natural Gas*, *Price 10 cents*; *Petroleum*, *Price 15 cents*; *Salt*, *Price 10 cents*; *Talc and Soapstone*, *Price 10 cents*; *Miscellaneous Non-Metallic Minerals* (including actinolite, barytes, bituminous sands, fluorspar, graphite, magnesitic-dolomite, magnesium sulphate, bog manganese, mineral waters, peat, phosphate, silica brick, sodium carbonate, sodium sulphate, sulphur-pyrites), *Price 15 cents*.

Structural Materials—The Cement Industry, *Price 15 cents*; Clay and Clay Products, *Price 15 cents*; Lime, *Price 10 cents*; Sand and Gravel, *Price 10 cents*; Stone, *Price 25 cents*.

[See also Reports on Iron and Steel and Their Products, Manufactures of Non-Ferrous Metals and Chemicals and Allied Products listed under "Manufactures", Section VII, Subsections (6), (7), (8) and (9).]

NOTE.—Subscription price for all Mining, Metallurgical and Chemical reports [including reports under groups (6), (7), (8), and (9), p. 1080], \$10 per year.

PRODUCTION—continued.

VII. MANUFACTURES.

- (1) *General*—General Report on the Manufacturing Industries of Canada, *Price 50 cents*. Geographical Distribution of the Manufacturing Industries of Canada, *Price 25 cents*; also Reports for the Provinces and Leading Cities: Quebec, *Price 20 cents*; Ontario, *Price 20 cents*; British Columbia, *Price 15 cents*; Prairie Provinces, *Price 25 cents*; Maritime Provinces, *Price 25 cents*. Alphabetical List of Products (annual report); Quantity of Manufacturing Production in Canada, 1923-29; Consumption of Luxuries (annual report).
- (2) *Manufactures of Vegetable Products*—General Report on Manufactures of Vegetable Products, *Price 50 cents*. Annual bulletins as follows: (a) Coffee, Tea, Spices and Miscellaneous Foods, *Price 25 cents*; (b) Fruit and Vegetable Preparation, including Canning, Evaporating and Preserving, and Pickles, Sauces, Vinegar and Cider, *Price 25 cents*; (c) Flour and Grist Mill Products, *Price 25 cents*; (d) Bread and Other Bakery Products, *Price 25 cents*; (e) Biscuits and Confectionery, including Cocoa and Chocolate, *Price 25 cents*; (f) Macaroni and Vermicelli, *Price 15 cents*; (g) Distilled Liquors, *Price 25 cents*; (h) Breweries, *Price 25 cents*; (i) Wine, *Price 25 cents*; (j) Rubber Industry, *Price 25 cents*; (k) Prepared Breakfast Foods, *Price 15 cents*; (l) Sugar Refineries, *Price 25 cents*; (m) Tobacco Products, *Price 25 cents*; (n) Linseed Oil and Soya Bean Oil, *Price 15 cents*; (o) The Canned Foods Industry, *Price 15 cents*; (p) Ice Cream, *Price 15 cents*; (q) Pack of Fruits and Vegetables, (preliminary), *Price 25 cents*; (r) Stocks of Unmanufactured Tobacco on Hand, (quarterly report), *Price 50 cents*; (s) Stocks of Canned Fruits and Vegetables, (quarterly report), *Price 50 cents*; (t) Aerated and Mineral Waters, *Price 15 cents*.
- (3) *Animal Products and Their Manufactures*—Annual Report as follows: The Dairy Factory Industry, *Price 25 cents*. Annual bulletins: (a) Slaughtering and Meat Packing and Sausage and Sausage Casings, *Price 25 cents*; (b) Leather Tanneries, *Price 25 cents*; (c) Miscellaneous Leather Goods, Leather Belting, Boot and Shoe Findings, Leather, *Price 25 cents*; (d) Leather Boots and Shoes, *Price 25 cents*; (e) Leather Gloves and Mitts, *Price 20 cents*; (f) Fur Goods, Fur Dressing and Dyeing, *Price 25 cents*. Monthly bulletin on Boot and Shoe Production, *Price 50 cents per year*. Monthly bulletin on Concentrated Milk Products, *Price 50 cents per year*.
- [See also Reports on Live Stock, etc., listed under "Agriculture".]
- (4) *Textile and Allied Industries*—General Report on the Textile Industries of Canada, *Price 50 cents*. Annual Bulletins as follows: (a) Cotton Textiles (cloth, yarn, thread and waste), *Price 35 cents*; (b) Woollen Textiles (cloth, yarn, waste, carpets and woollen goods, n.e.s.), *Price 35 cents*; (c) The Silk Industry, *Price 25 cents*; (d) Men's Factory Clothing, *Price 25 cents*; (e) Women's Factory Clothing, *Price 25 cents*; (f) Hats and Caps, *Price 25 cents*; (g) Hosiery and Knitted Goods, *Price 25 cents*; (h) Men's Furnishings, n.e.s., *Price 25 cents*; (i) Oiled Clothing and Waterproofs, *Price 15 cents*; (j) Cordage, Rope and Twine, *Price 15 cents*; (k) Corsets, *Price 15 cents*; (l) Cotton and Jute Bags, *Price 15 cents*; (m) Dyeing and Finishing of Textiles, *Price 15 cents*; (n) Awnings, Tents and Sails, *Price 15 cents*.
- (5) *Manufactures of Forest Products*—Annual Reports, *Price 25 cents each*: (a) The Lumber Industry; (b) The Pulp and Paper Industry; (c) Wood-Using Industries (biennial); (d) Paper-Using Industries (biennial). Annual bulletins: (a) The Lumber Industry, *Price 25 cents*; (b) Lumber Distribution in Canada and the United States (biennial), *Price 25 cents*; (c) The Pulp and Paper Industry, *Price 20 cents*. Annual Preliminary Reports on Wood-Using Industries: (a) Planing Mills, Sash and Door Factories, *Price 20 cents*; (b) Hardwood Flooring, *Price 15 cents*; (c) Furniture, *Price 15 cents*; (d) Boxes, Baskets and Crates, *Price 15 cents*; (e) Carriages, Sleighs and Vehicle Supplies, *Price 15 cents*; (f) Cooperage, *Price 10 cents*; (g) Coffins and Caskets, *Price 10 cents*; (h) Sporting Goods, *Price 10 cents*; (i) Boat Building, *Price 10 cents*; (j) Lasts, Trees and Shoe Findings, *Price 10 cents*; (k) Handles, Spools and Wood-turning, *Price 10 cents*; (l) Wooden-ware, *Price 10 cents*; (m) Excelsior, *Price 10 cents*; (n) Charcoal Manufacture, *Price 10 cents*; (o) Beekeepers' and Poultrymen's Supplies, *Price 10 cents*; (p) Miscellaneous Wood-Using Industries, *Price 10 cents*. Annual Preliminary Reports on Paper-Using Industries: (a) The Printing Trades (comprising the following industries: Printing and Publishing; Printing and Bookbinding; Lithographing; Engraving, Stereotyping and Electrotyping; Trade Composition; and Blue Printing), *Price 25 cents*; (b) Paper Boxes and Bags, *Price 15 cents*; (c) Roofing Paper, *Price 10 cents*; (d) Miscellaneous Paper Goods, *Price 10 cents*. Monthly bulletins: (a) Asphalt Roofing Production, *Price 50 cents per year*; (b) Asphalt Roofing Sales, *Price 50 cents per year*; (c) Rigid Insulating Board, *Price 50 cents per year*. Lumber Industry Series, *Price 50 cents*; Wood-Using Industries Series, *Price \$1.50*; Paper Using Industries Series, *Price \$1.75*.

PRODUCTION—concluded.**VII. MANUFACTURES—concluded.**

- (6) *Iron and Steel and Their Products*—Biennial Report, *Price 50 cents*. Annual bulletins as follows: Preliminary Summary on the Iron and Steel Industry—(a) Primary Iron and Steel, *Price 15 cents*; (b) Castings and Forgings, *Price 15 cents*; (c) Boilers, Tanks and Engines, *Price 10 cents*; (d) Farm Implements and Machinery, *Price 15 cents*; (e) Automobile Parts and Accessories, *Price 15 cents*; (f) Automobile Statistics for Canada, *Price 25 cents*; (g) Railway Rolling-Stock, *Price 10 cents*; (h) Wire and Wire Goods, *Price 15 cents*; (i) Sheet Metal Products, *Price 10 cents*; (j) Hardware, Tools and Cutlery, *Price 10 cents*; (k) Bridge Building and Structural Steel, *Price 10 cents*; (l) Miscellaneous Iron and Steel Products, *Price 10 cents*; (m) Machinery, *Price 15 cents*; (n) Bicycles, *Price 10 cents*; (o) Iron and Steel and Their Products (final summary), *Price 10 cents*. Commodity bulletins on the production of pig iron, steel, washing machines, cream separators, warm air furnaces, galvanized sheets, wire nails, wire rope and cable, steel wire, wire fencing, stoves, etc. Monthly Reports: (a) Pig Iron, Steel, and Ferro-Alloys, *Price \$1 per year*; (b) Automobile Statistics for Canada, *Price \$1 per year*.
- (7) *Manufactures of Non-Ferrous Metals*—Biennial Report, *Price 25 cents*. Annual bulletins as follows: (a) Aluminium Products, *Price 10 cents*; (b) Brass and Copper Products, *Price 15 cents*; (c) White Metal Alloys, *Price 15 cents*; (d) Jewellery and Silverware, *Price 15 cents*; (e) Electrical Apparatus and Supplies, *Price 25 cents*; (f) Miscellaneous Non-Ferrous Metal Products, *Price 10 cents*; (g) Non-Ferrous Smelting and Refining, *Price 15 cents*; (h) Manufactures of the Non-Ferrous Metals (final summary), *Price 10 cents*. Quarterly reports on production and sales of radio sets, *Price 50 cents per year*. Quarterly reports on sales of storage batteries, *Price 50 cents per year*. Commodity bulletins on the production of batteries, silverware, vacuum cleaners, electric motors and generators, electric transformers, incandescent lamps, etc.
- (8) *Manufactures of the Non-Metallic Minerals*—Biennial Report, *Price 25 cents*. Annual bulletins as follows: Preliminary Summary on Manufactures of Non-Metallic Minerals—(a) The Asbestos Mining Industry and the Asbestos Products Industry, *Price 15 cents*; (b) The Cement Industry, *Price 15 cents*; (c) Coke and Gas, *Price 15 cents*; (d) Glass (blown, cut, and ornamental, etc.), *Price 10 cents*; (e) Lime, *Price 10 cents*; (f) Petroleum Products, *Price 25 cents*; (g) Clay and Clay Products, *Price 15 cents*; (h) Salt, *Price 10 cents*; (i) Sand-Lime Brick, *Price 10 cents*; (j) Stone (primary, monumental, and ornamental), *Price 25 cents*; (k) Abrasives, *Price 15 cents*; (l) Miscellaneous Non-Metallic Mineral Products (including carbon electrodes—gypsum products—mica products—non-metallic minerals, *n.e.s.*), *Price 10 cents*. Non-Metallic Mineral Products (final summary), *Price 10 cents*. Special Report on the Consumption of Coke in Canada, *Price 10 cents*. Monthly Report on Coke Statistics, *Price 50 cents per year*.
- (9) *Chemicals and Allied Products*—Biennial Report, *Price 25 cents*. Annual bulletins as follows: Preliminary Summary on Chemicals and Allied Products—(a) Coal Tar Distillation, *Price 10 cents*; (b) Acids, Alkalies and Salts, *Price 10 cents*; (c) Compressed Gases, *Price 10 cents*; (d) Explosives, Ammunition and Fireworks, *Price 10 cents*; (e) Fertilizers, *Price 10 cents*; (f) Medicinal and Pharmaceutical Preparations, *Price 15 cents*; (g) Paints, Pigments and Varnishes, *Price 15 cents*; (h) Soaps, Cleaning Preparations and Washing Compounds, *Price 15 cents*; (i) Toilet Preparations, *Price 15 cents*; (j) Inks, *Price 10 cents*; (k) Adhesives, *Price 10 cents*; (l) Polishes and Dressings, *Price 10 cents*; (m) Hardwood Distillation, *Price 10 cents*; (n) Miscellaneous Chemical Products (including boiler compounds—cellulose products—insecticides—sweeping compounds—disinfectants—matches—dyes and colours—chemical products, *n.e.s.*), *Price 10 cents*. Special Report on the Fertilizer Trade in Canada, *Price 10 cents*. Commodity bulletins on Sulphuric Acid, Ammonium Sulphate, etc. Special Report—Directory of Chemical Industries in Canada, as of July 1, 1932, *Price 50 cents*. Special Report on the Consumption of Chemicals in Municipal Waterworks in Canada, 1934 and 1935, *Price 25 cents*.
- (10) *Miscellaneous Manufactures*—General Report, *Price 25 cents*. Annual Bulletins as follows: (a) Brooms, Brushes and Mops, *Price 15 cents*; (b) Musical Instruments (including pianos, organs and phonographs) and Musical Instrument Materials and Parts, *Price 15 cents*; (c) Buttons, *Price 15 cents*; (d) Bed Springs and Mattresses, *Price 15 cents*.

NOTE.—For statistics of water power and central electric stations, see under heading "Public Utilities", p. 1083.

VIII. CONSTRUCTION.

Building Permits—Monthly and Annual Record, *Price \$1 per year*. Annual Report, The Construction Industry in Canada, *Price 25 cents*.

EXTERNAL TRADE (IMPORTS AND EXPORTS)—

- (1) Annual Report of the Trade of Canada, for the fiscal year ended Mar. 31 (showing summary historical tables, analyses of current trends, detailed tables by items, group analyses according to component material, origin and degree of manufacture, and purpose, and comparisons of the volume of trade), *Price \$3*.
- (2) Condensed Preliminary Report of the Trade of Canada, for the fiscal year ended Mar. 31, *Price 25 cents*.
- (3) Annual Report of the Trade of Canada for the calendar year, *Price 50 cents*. (*Free to subscribers to Quarterly Trade Report.*)
- (4) Review of Canada's Foreign Trade during the calendar year, *Price 25 cents*.
- (5) Quarterly Report of the Trade of Canada (showing statistics of imports and exports by months and cumulative quarters), *Price \$2 per year*.
- (6) Monthly Summary of the Trade of Canada (for latest month and latest 12 months), *Price \$1 per year*.
- (7) Monthly bulletins on Trade Statistics as follows: (a) Abstract of Imports, Exports, and Duty Collected (by latest month, accrued period, and latest 12 months), *Price 75 cents per year*; (b) Summary of Canada's Imports (for latest month), *Price 75 cents per year*; (c) Summary of Canada's Exports (for latest month), *Price 75 cents per year*; (d) Canada's Imports from Principal Countries (for latest month and accrued period), *Price 75 cents per year*; (e) Canada's Domestic Exports to Principal Countries (for latest month and accrued period), *Price 75 cents per year*; (f) Canada's Monthly Trade Trends with Empire Countries (by months and accrued period), *Price 75 cents per year*. *The complete series in this section (7) may be obtained for \$2 per year.*
- (8) Monthly Commodity Bulletins: (a) Imports and Exports of Asbestos; (b) Imports and Exports of Coffee and Tea; (c) Imports of Farm Implements and Machinery; (d) Exports of Farm Implements and Machinery; (e) Imports and Exports of Fertilizers; (f) Imports and Exports of Footwear (except rubber); (g) Exports of Grain and Flour; (h) Imports and Exports of Hides and Skins; (i) Imports of Lumber; (j) Exports of Lumber; (k) Imports of Meats, Lard and Sausage Casings; (l) Exports of Meats, Lard and Sausage Casings; (m) Imports of Milk, Milk Products and Eggs; (n) Exports of Milk, Milk Products and Eggs; (o) Imports of Non-Ferrous Metals and Smelter Products; (p) Exports of Non-Ferrous Metals and Smelter Products; (q) Imports of Paints and Varnishes; (r) Exports of Paints and Varnishes; (s) Imports of Petroleum and Products; (t) Exports of Petroleum and Products; (u) Imports and Exports of Pipes, Tubes and Fittings; (v) Imports of Pulpwood, Pulp and Paper; (w) Exports of Pulpwood, Pulp and Paper; (x) Imports of Rubber and Products; (y) Exports of Rubber and Products; (z) Imports of Sheet Metal Products; (aa) Imports and Exports of Vegetable Oils; (bb) Imports of Vehicles (of iron); (cc) Imports and Exports of Wire; (dd) Imports and Exports of Soap; (ee) Imports and Exports of Fresh Fruits; (ff) Imports and Exports of Fresh Vegetables; (gg) Imports and Exports of Pickles and Canned Vegetables; (hh) Imports and Exports of Canned and Preserved Fruits; (ii) Imports of Animals, Living; (jj) Exports of Animals, Living; (kk) Imports and Exports of Toilet Preparations. *Price \$1 per year for imports and exports of one commodity.*
- (9) Special Trade Reports: (a) Trade of Canada with Pacific Countries (1932); (b) Canada-Belgium Trade, 1933; (c) Canada's Imports of Commodities not produced in Canada, 1929-1933; (d) Canada-Austria Trade, 1934; (e) Canada-Germany Trade, 1934.

NOTE.—Subscription price for all External Trade Branch publications \$15 per year.

INTERNAL TRADE—

1. RETAIL AND WHOLESALE TRADE (See Vols. X and XI under *Report of the Seventh Census*, p. 1074):—

(a) Census of Merchandising and Service Establishments, 1931:—

Final Reports (printed)—Retail trade for the Dominion and the provinces, showing number of establishments, kinds of business, types of operation, full-time and part-time employees and wages, operating expenses, size of business, credit sales, forms of organization, capital invested, and sales by commodities; details for cities with populations of 30,000 and over by kinds of business, and types of operation, and by kinds of business for counties or census divisions and incorporated places with populations of 1,000 and over. Retail Trade, Canada,

INTERNAL TRADE—continued.

1. RETAIL AND WHOLESALE TRADE—concluded.

(a) Census of Merchandising and Service Establishments, 1931—concluded.

Final Reports (printed)—concluded.

Price 50 cents; Ontario, Price 50 cents; Quebec, Price 50 cents; similar reports for each of the other provinces, Price 25 cents. Reports on wholesale trade similar in form and scope to the retail series. Wholesale Trade in Canada, *Price 25 cents*; similar reports for each of the five economic divisions of the country, *Price 25 cents.* Census of Canada, 1931, Vol. X—comprises the merchandising statistics contained in the retail series together with an analysis of results and special tables showing commodity sales; Vol. XI—comprises (1) statistics on retail services contained in the retail trade series, (2) all statistics on wholesale trade, (3) special sections dealing with retail chains, hotels, and distribution of sales of manufacturing plants, (4) analysis of results. *Price—Cloth \$1, Paper 75 cents for each volume.*

(b) *Annual Reports (processed)*—Estimates of the total retail and wholesale trade, by provinces and by kinds of business. Retail Trade in Canada, *Price 25 cents.* Separate reports for the five economic divisions, *Price 10 cents each.* Wholesale Trade in Canada and the Provinces, *Price 10 cents.* Miscellaneous Results on Retail Trade (gross margins, stocks, payroll, accounts outstanding), *Price 10 cents.* Similar report on wholesale trade, *Price 10 cents.* Motion Picture Theatres, *Price 25 cents.* Sales of Manufacturers' Outlets, *Price 10 cents.* Complete merchandising series for one year, *Price \$1.*

(c) *Monthly Reports*—Changes in the Value of Wholesale Sales; Changes in the Value of Country General Store Sales; *Price 75 cents per year for each publication.* Changes in the Value of Retail Sales; New Motor Vehicle Sales for Canada and the Provinces; Financing of Automobile Sales; *Price \$1 per year for each publication; the two last-named together \$1.50 per year.*

(d) *Special Reports*—A Decade of Retail Trade, 1923-1933 (estimated sales by provinces and by kind-of-business groups carried back to 1923 and extended to 1933); Comparative figures for chain stores. Monthly Indexes of Retail Sales, 1929-1935 (monthly reports on retail trade summarized, corrections applied to allow for differences in number of business days and for seasonal variations). Weekly Earnings of Employees in Merchandising and Service Establishments, 1936—average weekly earnings for male and female employees shown by provinces and for selected kinds of business. Distribution of employees to show percentages of total number receiving various weekly amounts, *Price 25 cents.* The Marketing Structure of the Wholesale Grocery Trade (special analysis of wholesale grocery trade, together with summary figures on grocery retailing), *Price 25 cents.*

2. PRICES STATISTICS.

Annual Reports—Report on Prices and Price Indexes in Canada, in the British Empire, and in Foreign Countries (dealing with exchange and currency, security prices—common stocks, preferred stocks, mining stocks—bond yields, U.S. common stocks, prices and index numbers of street car rates, hospital charges, manufactured and fuel gas, electric light rates, telephone rates—and import and export prices and valuations), *Price 25 cents.* Preliminary Summary of Price Movements, 1936.

Quarterly Reports—Index Numbers of Wholesale Prices and Cost of Living in Canada, British Empire and Foreign Countries, *Price 25 cents per year.*

Monthly Reports—Index Numbers of Wholesale and Retail Prices in Canada—Security Prices—Exchange Rates, *Price \$1 per year.*

Weekly Reports—Index Numbers of Wholesale Prices; Index Numbers of Common Stock Prices and Long Term Bond Yields; Index Numbers of Mining Stock Prices, *Price \$1.50 per year.*

Special Reports—Urban Earnings and Housing Accommodation in Canada, 1931 and 1936, *Price 25 cents.*

The complete Prices Series of reports, Price \$2.

3. RECORDS OF BRANCH PLANT DEVELOPMENT IN CANADA.

Lists of New Concerns Locating in Canada in Recent Years. Bulletin on Branch and Subsidiary Industries in Canada, *Price 10 cents.* British and Foreign Direct Investments in Canada.

INTERNAL TRADE—concluded.

4. BALANCE OF INTERNATIONAL PAYMENTS, CAPITAL MOVEMENTS, AND INTERNATIONAL INVESTMENTS.

(a) *Annual Reports*—The Canadian Balance of International Payments, 1926-1936. (Current international transactions in goods, gold and services and movements of capital), *Price 25 cents*. British and Foreign Capital Invested in Canada, and Canadian Capital Invested Abroad 1926-1936, *Price 25 cents*. Estimated Balance of International Payments for Canada, British and Foreign Investments in Canada, and Canadian Investments Abroad. Preliminary Statements for 1937, *Price 15 cents*.

(b) *Monthly Reports*—Sales and Purchases of Securities Between Canada and Other Countries. *Price, single copies 10 cents, \$1 per year*.

NOTE.—Subscription price for all Internal Trade Branch publications, \$5 per year.

TRANSPORTATION, COMMUNICATIONS AND PUBLIC UTILITIES—

(1) *Railways and Tramways*.—Annual Reports: (a) Railway Statistics, *Price 50 cents*; (b) Electric Railway Statistics, *Price 25 cents*; (c) Location of Railway Mileages, *Price 10 cents*; (d) Summary of Monthly Railway Traffic Report, *Price 25 cents*; (e) Canadian National Railways, 1923-1936, *Price 20 cents*; (f) Canadian Pacific Railway, 1923-1936, *Price 20 cents*. Monthly Reports: (a) Railway Revenues, Expenses, Incomes, and Operating Statistics, *Price 50 cents*; (b) Freight Traffic of Railways, *Price 50 cents*. Weekly Report: Car Loadings of Revenue Freight, *Price \$1.50 per year*. Special Report: Index Numbers of Railway Freight Rates, *Price 25 cents*. Subscription price for all railway reports, \$3 per year.

(2) *Express*.—Annual Report on Express Statistics, *Price 25 cents*.

(3) *Telegraphs*.—Annual Report on Telegraph Statistics, *Price 25 cents*.

(4) *Telephones*.—Annual Report on Telephone Statistics, *Price 25 cents*.

(5) *Water Transportation*.—(a) Annual Report on Canal Statistics, *Price 25 cents*; (b) Monthly Report on Canal Statistics, *Price 50 cents*.

(6) *Electrical Stations*.—(a) Annual Report on Central Electric Stations in Canada, *Price 25 cents*; (b) Report on Index Numbers of Electric Light Rates, *Price 25 cents*; (c) Report on use of Electric Energy in Industries, *Price 25 cents*; (d) Monthly Report on Electric Energy Generated, *Price 50 cents*. Subscription price for all central electric station reports, \$1 per year.

(7) *Motor Vehicles*.—(a) Annual Report on Motor Vehicle Registrations, *Price 10 cents*; (b) Highways—Annual Report on Highway Mileage Open for Traffic, Construction, and Expenditures on Construction and Maintenance, *Price 25 cents*.

(8) *Civil Aviation*.—Annual Report, *Price 25 cents*.

NOTE.—Subscription price for all Transportation, Communications, and Public Utilities Branch publications, \$5 per year.

FINANCE—

THE PUBLIC DEBT OF CANADA, DOMINION, PROVINCIAL AND MUNICIPAL, *Price 25 cents*.

PROVINCIAL PUBLIC FINANCE.

(1) *Financial Statistics of Provincial Governments*.—(a) 1921 to 1936, including special Summaries and Analyses (1923, 1924, and 1927-31, out of print), *Price 25 cents*; (b) Bonded Indebtedness of Provinces. Special analysis, 1916 to 1930. (Out of print.)

MUNICIPAL FINANCE.

(1) *Statistics of Cities and Towns*.—(a) Urban Municipalities Having a Population of 10,000 and Over, 1919 and 1920; (b) 1925 to 1935, *Price 25 cents* (1925 and 1928 out of print); (c) Urban Municipalities Having Populations of 3,000 to 10,000, 1919; (d) Urban Municipalities Having Populations of 1,000 to 3,000, 1920; (e) Urban Municipalities Having Populations of 5,000 and Over, and 1,000 to 5,000, 1922.

(2) *Assessment Valuations. Analysis by Classes of Municipalities*.—(a) 1919 to 1923; (b) 1924 to 1935, *Price 25 cents*.

(3) *Bonded Indebtedness by Classes of Urban and Rural Municipalities*.—(a) 1919 to 1935, *Price 25 cents*. (1919-23 out of print.)

(4) *Municipal Tax Levies and Receipts*.—Historical Analysis, 1913-35, *Price 25 cents*.

FINANCE—concluded.**CIVIL SERVICE STATISTICS OF THE DOMINION GOVERNMENT.**

- (a) Numbers of Personnel and Salary Expenditure for the Month of January, 1912-1924; (Special Report—out of print); (b) Numbers of Personnel and Salary Expenditures by Months, *Price 25 cents*—(1) 1925-31; (2) 1932-34; (3) 1935-36.

JUSTICE—

Criminal Statistics.—Annual Report, *Price 50 cents.* (Covers convictions, sentences, prison statistics, police statistics, pardons, commutations, and executions.)

EDUCATION—

Annual Survey of Education in Canada.—(Published annually since 1921.) Includes a bibliography of Canadian studies in education (since 1932) and an index of Canadian education periodicals (since 1934). *Price 50 cents.*

Biennial Survey of Libraries in Canada, 1931, 1933, 1935.—(Previous to 1931 library statistics were published at irregular intervals, first for the year 1921.) The Survey now includes public, university, college, government and other technical libraries in each edition. Libraries are listed individually with addresses, names of librarians, and certain other information concerning each library. School libraries were reviewed in the Survey for 1935; hospital and other institutional libraries in the Survey for 1931. *Price 25 cents.*

Report of Dominion-Provincial Conference on School Statistics, 1920, 1936.—A statement of the recommendations for increased comparability and usefulness in school statistics, resulting from discussion among officials of the provincial Departments of Education and the Dominion Bureau of Statistics. *Free.*

SPECIAL EDUCATIONAL BULLETINS.—

- (1) *Salaries, Qualifications and Experience of Canadian Teachers.*—A presentation of statistics for six provinces according to the plan recommended by the Dominion-Provincial Conference of 1936. *Price 15 cents.*
- (2) *Supply and Demand in the Professions in Canada.*—The census record of professional occupations is consulted, along with university statistics of recent years, to see to which occupations the universities are graduating more (or fewer) workers than required. A list of schools and faculties training for each profession is appended. *Price 25 cents.*
- (3) *The Use of Films and Slides in Canadian Schools.*—A summary of the information collected concerning more than 90 per cent of Canadian schools. Includes a list of about 70 motion picture sources in Canada, and 300 addresses of persons especially interested in school motion pictures. *Price 25 cents.*
- (4) *The Use of Radios and Phonographs in Canadian Schools.*—A companion bulletin to Number 3. *Price 25 cents.*
- (5) *The Extent of Language Study in High Schools.*—A comparison of the Canadian provinces with the States of the United States. *Price 15 cents.*
- (6) *Directory of Private Schools in Eight Provinces.*—Includes the addresses of independent elementary, secondary and commercial schools in all provinces except Quebec (for which a similar list is published by the province). Indicates for each school its control, and whether its pupils are elementary or secondary, boys or girls. A page is included to indicate what other school directories are available in Canada. *Price 25 cents.*
- (7) *List of Public Secondary Schools in Canada.*—Lists the larger secondary schools of each province alphabetically according to post office address—about 1,150 academic, 80 technical, and 100 commercial high schools. Agricultural schools and schools of fine art are also included. *Price 50 cents.*

NOTE.—Subscription price for all Education Branch publications, \$1 per year.

GENERAL—

- (1) *National Wealth and Income*.—Estimates of the National Wealth of Canada, by Provinces, Industries, etc., *Price 25 cents*; Income Assessed for Income War Tax, *Price 15 cents*.
- (2) *Employment*.—Monthly and Annual Reports on Employment (with Index Numbers of Employment by Economic Areas, Cities and Industries), *Price \$1 per year*.
- (3) *Commercial Failures*.—Monthly and Annual Reports, *Price 50 cents per year*.
- (4) *Bank Debits*.—Monthly and Annual Reports of Bank Debits to Individual Accounts at the Clearing-House Centres of Canada and the Equation of Exchange, *Price 50 cents per year*.
- (5) *Business Statistics*.—The Monthly Review of Business Statistics, *Price \$1 per year*—A statistical summary with charts and text, of current economic conditions in Canada. Special Supplements, *Price 25 cents*—Twelve Years of the Economic Statistics of Canada, 1919-30; Monthly Indexes of the Physical Volume of Business in Canada, 1919-32; Original Monthly Statistics of Chief Economic Importance, 1919-33. Recent Economic Tendencies in Canada 1919-1934, *Price 25 cents*. Economic Fluctuations in Canada During the Post-War Period, *Price 25 cents*. Business Conditions in Canada in Elapsed Months of Current Year (monthly), *Price \$1 per year*.
- (6) *Divorce*.—Annual Report, *Price 10 cents*.
- (7) *Liquor Control*.—Annual Report on the Control and Sale of Liquor, *Price 25 cents*.
- (8) *Tourist Trade*.—Annual Report, *Price 25 cents*.
- (9) *The Maritime Provinces in Their Relation to the National Economy of Canada*.—A statistical study of their social and economic condition since Confederation, *Price 50 cents*.
- (10) *The Prairie Provinces in Their Relation to the National Economy of Canada*.—A statistical study of their social and economic condition in the twentieth century, *Price 50 cents*.
- (11) *The Canada Year Book*.—The official statistical annual of the physiography, resources, history, institutions, and social and economic conditions of the Dominion, with a statistical summary of the progress of Canada, maps, diagrams, etc., *Price \$1.50*.

Contents: I. Physical Characteristics of Canada (geographical features; geological formation; seismology; flora; fauna, natural resources; climate and meteorology). II. History and Chronology. III. Constitution and Government (constitution and general government of Canada; provincial and local government in Canada; parliamentary representation in Canada). IV. Population (growth and distribution). V. Vital Statistics. VI. Immigration. VII. Survey of Production. VIII. Agriculture. IX. Forestry. X. Fur Resources and Fur Production. XI. Fisheries. XII. Mines and Minerals. XIII. Water Power. XIV. Manufactures. XV. Construction. XVI. External Trade. XVII. Internal Trade. XVIII. Transportation and Communications (government control over transportation and communications; steam railways; electric railways; express companies; road transportation; waterways; air navigation; wire communications; wireless communications; the post office; the press). XIX. Labour and Wages. XX. Prices. XXI. Public Finance (Dominion public finance; provincial public finance; municipal public finance; national wealth and income). XXII. Currency and Banking; Miscellaneous Commercial Finance. XXIII. Insurance (and Government annuities). XXIV. Commercial Failures. XXV. Education. XXVI. Public Health and Related Institutions. XXVII. Judicial and Penitentiary Statistics. XXVIII. Miscellaneous Administration (public lands; national defence; public works; etc.). XXIX. Sources of Official Statistical and Other Information Relative to Canada. XXX. The Annual Register (Dominion legislation; principal events of the year; extracts from the *Canada Gazette*, re official appointments, commissions, etc.). Appendix.

(Issues of the *Canada Year Book* for 1920 (English only), 1921, 1924, 1925, 1926 (English only), 1929, 1930, 1931, and 1936, are available.)

GENERAL—concluded.

- (12) *Canada*.—The Official Handbook of Present Conditions and Recent Progress (published annually), *Price 25 cents*.
- (13) *The Daily News Bulletin*.—A mimeographed report summarizing the chief items of statistical importance in news-letter form, and listing the reports issued each day by the Bureau of Statistics, *Price \$1.50 per year*.
- (14) *The Weekly News Bulletin*.—A mimeographed report summarizing the chief items of statistical importance in news-letter form, and listing the reports issued each week by the Bureau of Statistics, *Price \$1 per year*.
- (15) *A Fact a Day about Canada*.—A monthly compilation of daily facts, particularly useful in school work, *Price 25 cents a year*.

NOTE.—*The complete service of all publications issued by the Bureau (with the exception of news bulletins) may be obtained for a special rate of \$20 per year.*

Section 2.—Acts Administered by Dominion Departments.**List of the Principal Acts of Parliament Administered by Departments of the Government of the Dominion of Canada, as Compiled from Information Supplied by the respective Departments.**

(Numbers within parentheses, unless otherwise indicated, denote chapters of the Revised Statutes of Canada, 1927—R.S.C., 1927.)

NOTE.—*Copies of individual Acts of Parliament may be obtained from the King's Printer at prices of from 10 cents to \$1 per copy according to number of pages.*

Agriculture.—Department of Agriculture (4); Experimental Farm Stations (61); Dairy Industry (45); Cold Storage (25); Seeds (185); Feeding Stuffs (67); Live Stock Pedigree (121); Live Stock and Live Stock Products (120); Animal Contagious Diseases (6); Meat and Canned Foods (77); Destructive Insect and Pest (47); Fertilizers (69); Root Vegetables (181); Section 235, Criminal Code (Race Track Betting) (36); Inspection and Sale (100); Maple Sugar Industry (1930, c. 30); Agricultural Pests Control (5); Natural Products Marketing (1934, c. 57; 1935, c. 64); Hay and Straw Inspection (1932-33, c. 26); Prairie Farm Rehabilitation (1935, c. 23); Fruit, Vegetables and Honey (1935, c. 62).

Auditor General.—Consolidated Revenue and Audit (1931, c. 27).

Civil Service Commission.—Civil Service (22), as amended (1932, c. 40).

External Affairs.—The functions and duties of this Department are defined by the Department of External Affairs Act (65).

Finance.—Appropriation; Bank (1934, c. 24); Bank of Canada (1934, c. 43 and 1936, c. 22); Bankruptcy (11) and (1931, cc. 17 and 18, and 1932, c. 39); Bills of Exchange (16) and (1934, c. 17); Board of Audit (10); Canadian Farm Loan (66) and (1934, c. 46 and 1935, c. 16); Canadian Fisherman's Loan (1935, c. 52); Canadian National Railways Refunding (1935, c. 3); Canadian National Railways Financing and Guarantee, (1937, c. 6); Civil Service Superannuation (24); Consolidated Revenue and Audit (1931, c. 27); Currency (40); Dept. of Finance and Treasury Board (71) and (1931, c. 48); Exchange Fund (1935, c. 60); Farmers' Creditors Arrangement (1934, c. 53 and 1935, cc. 20 and 61); Federal District Commission (1927, c. 55; 1928, c. 26); Dominion Housing (1935, c. 58) Home Improvement Loans Guarantee (1937, c. 11); Interest (102); Old Age Pensions (156) (1931, c. 42; 1937, c. 13); Penny Bank (13); Provincial Subsidies (192); Quebec Savings Banks (14) (1934, c. 39); Special War Revenue (179) (1928, c. 50; 1934, c. 42)—(in part); Gold Export (1932, c. 33; 1935, c. 21); Tariff Board (1931, c. 55); Winding-Up (213). Not regularly administered by the Department but under the jurisdiction of the Minister of Finance: Escheats (58); Money Lenders (135); Pawnbrokers (152); Satisfied Securities (184).

Fisheries.—Fisheries (1932, c. 42; 1934, c. 6; 1935, c. 5); Fish Inspection (72); Meat and Canned Foods (77) (1934, c. 38; 1935, c. 31, so far as it relates to fish and shellfish); Deep-Sea Fisheries (74); Northern Pacific Halibut Fishery (Convention) (1937, c. 36); Pelagic Sealing (153); Customs and Fisheries Protection (43) so far as it relates to fisheries; Navigable Waters Protection (140, in part); Act respecting Sockeye Salmon Fisheries Convention (1930, c. 10); The Fisheries Research Board Act (1937, c. 31) is also administered by the Minister of Fisheries.

Insurance.—Department of Insurance (1932, c. 45); Canadian and British Insurance Companies (1932, c. 46; 1932-33, c. 32; 1934, cc. 27, 45; 1936, c. 18; 1937, c. 5); Foreign Insurance Companies (1932, c. 47; 1934, c. 36); Loan Companies (28) (1934, c. 56); Trust Companies (29) (1931, c. 57); Civil Service Insurance (23).

Justice.—Department of Justice (106); Solicitor-General's (107); Northwest Territories (142); Yukon (215); Royal Canadian Mounted Police (160); Judges (105); Supreme Court (35); Exchequer Court (34); Admiralty (33); Petition of Right (158); Criminal Code (36); Penitentiary (154); Prisons and Reformatories (163); Identification of Criminals (38); Ticket of Leave (197); Fugitive Offenders (81); Extradition (37); Juvenile Delinquents (108). The following Acts, while not regularly administered by the Department, are under the jurisdiction of the Minister of Justice: Canada Evidence (59); Marriage and Divorce (127); Tobacco Restraint (199); Debts due the Crown (1927, c. 51; 1932, c. 18); Juvenile Delinquents (1929, c. 46); Administration of Justice in the Yukon (1920, c. 62); Divorce (Ontario, 1930, c. 14); Divorce Jurisdiction (1930, c. 15).

King's Printer and Controller of Stationery.—Public Printing and Stationery (162); The Publication of Statutes (2).

Labour.—Labour Department (111); Conciliation and Labour (110); Industrial Disputes Investigation (112); Fair Wages Resolution of the House of Commons, 1900; Fair Wages and Hours of Labour (1935, c. 39); Employment Offices Co-ordination (57); Technical Education (193) (1934, c. 9); Vocational Education (1931, c. 59); Government Annuities (7) (1931, c. 33); Combines Investigation (26) as amended (1935, c. 54, and 1937, c. 23); White Phosphorous Matches (128); Unemployment Relief (1930, c. 1); Unemployment and Farm Relief (1931, c. 58) and Unemployment and Farm Relief Continuance (1932, c. 13); Relief (1932, c. 36); Relief (1932-33, c. 18); Relief (1934, c. 15); Relief (1935, c. 13); Unemployment Relief and Assistance (1936, cc. 15, 46); Unemployment and Agricultural Assistance (1937, c. 44).

Mines and Resources.—Lake of the Woods Control Board (1921, c. 10); Explosives (62); Forest Reserves and Parks (78); Geology and Mines (83); Seed Grain (87); Seed Grain Sureties (88); The Immigration Act (93); The Chinese Immigration Act (95); Indian Act (98); Irrigation (104); Dominion Lands (113); Public Lands Grants (114); Ordnance and Admiralty Lands (115); Railway Belt (116); Dominion Lands Survey (117); Lands Titles (118); Manitoba Supplementary Provisions (124); Migratory Birds Convention (130); Northwest Game (141); Northwest Territories (142); Reclamation (175); Saskatchewan and Alberta Roads (180); Soldier Settlement (188); Dominion Water Power (210); Railway Belt Water (211); Yukon (215); Yukon Placer Mining (216); Yukon Quartz Mining (217); St. Regis Islands (1927, c. 37); An Act respecting certain debts due the Crown (1927, c. 51); Domestic Fuel (1927, c. 52); Lac Seul Conservation (1928, c. 32); An Act respecting Water Power in Alberta, Saskatchewan, and Manitoba, (1929, c. 61); Alberta Natural Resources (1930, c. 3); Manitoba Natural Resources (1930, c. 29); National Parks (1930, c. 33); Railway Belt and Peace River Block (1930, c. 37); Saskatchewan Natural Resources (1930, c. 41); Refunds (Natural Resources) (1932, c. 35).

National Defence.—Department of National Defence (136); Naval Service (139); Naval Discipline; Militia (132); Militia Pension (133); Royal Military College (1928, c. 7); Ss. 85 and 86 Criminal Code; Army; Regimental Debts; Aeronautics (3); Air Force; Visiting Forces (British Commonwealth), 1933 (1932-33, c. 21).

National Revenue.—Customs Tariff (44); Customs (42); Canada Shipping (in part) (186); Animal Contagious Diseases (in part) (6); Destructive Insect and Pest (in part) (47); Export (63); Copyright (in part) (32); Petroleum and Naphtha (159); Excise (60); Special War Revenue, 1915 (179); Income War Tax, 1917 (97); Agricultural Pests Control (in part) (5); Customs and Fisheries Protection (in part) (43); Explosives (in part) (62); Fertilizers (in part) (69); Food and Drugs (in part) (76); Fruit, Vegetables, and Honey, (in part) (1935, c. 62); Inspection and Sale (in part) (100); Meat and Canned Foods (in part) (77); Opium and Narcotic Drug (in part) (144); Precious Metals Marking (in part) (84); Patent and Proprietary Medicine (in part) (151); Quarantine (in part) (168); Seeds (in part) (185); Weights and Measures (in part) (212).

Pensions and National Health.—*Pensions:* Department of Pensions and National Health (Part I) (1928, c. 39); War Veterans' Allowance (1930, c. 48, and amendments); Veteran's Assistance Commission (1936, c. 47); Pension (157 and amendments); Returned Soldiers' Insurance (1920, c. 54, and amendments). The two latter Acts are adjudicated upon by the Canadian Pension Commission. *National Health:* Department of Pensions and National Health (Part II) (1928, c. 39); Quarantine (168); Public Works Health (91); Leprosy (119); Canada Shipping (Sick and Distressed Mariners) (1934, c. 44); Proprietary or Patent Medicine (151); Opium and Narcotic Drug (1929, c. 49 and amendments); Food and Drugs (including Honey) (76 and amendments).

Post Office.—Post Office (161); Special War Revenue (in part) (179),

Public Archives.—Public Archives (8),

Public Works.—Expropriation (64); Ferries (68); Government Harbours, Piers and Breakwaters (Section 5) (89); Navigable Waters Protection (Part I) (140); Public Works (166); Government Works Toll (167); Railway (Section 248) (170); Dry Dock Subsidies (191); Telegraphs (194); National Art Gallery (1913, c. 33); Act Regulating Vehicular Traffic on Dominion Property (1930, c. 47).

Secretary of State.—Companies (1934, c. 33) as amended; Naturalization (138); Patents (1935, c. 32); Copyright (32) as amended; Unfair Competition (1932, c. 38); Canada Temperance (196); Boards of Trade (19) as amended; Ticket of Leave (197) as amended; Trade Unions (202); Companies' Creditors Arrangement (1932-33, c. 36); Canadian Nationals (21) Department of State (189); Translation Bureau (1934, c. 25); Treaties of Peace; Timber Marking (198) (1930, c. 45); Trade Mark and Design (201) (1928, c. 10).

Trade and Commerce.—Canada Grain (1930, c. 5; 1932-33, cc. 9, 24; 1934, c. 26); Electricity and Fluid Exportation (54); Electricity Inspection (55); Electric Units (56); Gas Inspection (82); Inland Water Freight Rates (208); Precious Metals Marking (84) (1928, c. 40; 1929, c. 53); Statistics (190); Weights and Measures Inspection (212); Act to place Canadian Coal used in the Manufacture of Iron or Steel on a Basis of Equality with Imported Coal (1930, c. 6); Water Meters (209); Research Council (177); Canadian Wheat Board (1935, c. 53); Dominion Trade and Industry Commission (1935, c. 59).

Transport.—Canada Shipping, 1934 (1934, c. 44); Government Harbours and Piers (89); Live Stock Shipping (122); Maritime Conventions (126); Navigable Waters Protection (Part 2) (140); Government Vessels Discipline (203); The Water-Carriage of Goods, 1936 (1936, c. 49); United States Wreckers (214); Belleville Harbour Commission (1889, c. 35); Hamilton Harbour Commission (1912, c. 98); North Fraser Harbour Commission (1913, c. 162); New Westminster Harbour Commission (1913, c. 158); Trenton, Ontario, Harbour Commission (1922, c. 50); Dominion Harbour Commission, 1911 (1911, c. 26); Winnipeg and St. Boniface Harbour Commission (1912, c. 55); National Harbours Board, 1936 (1936, c. 42); Canadian Broadcasting, 1936 (1936, c. 24); Department of Transport (171), as amended (1936, c. 34); Government Railways (173); Intercolonial and Prince Edward Island Railways Employees' Provident Fund (1907, c. 22); National Transcontinental Railway (1903, c. 71); Canadian National Railways (172); Government Employees' Compensation (30); Canadian National Steamships, 1927 (1927, c. 29); Maritime Freight Rates (79); Canadian National-Canadian Pacific, 1933 (1933, c. 33) as amended (1936, c. 25); Railway (170); Trans-Canada Air Lines, 1937 (1937, c. 43); Radiotelegraph (195); Aeronautics (3).

An Act Respecting the Beauharnois Light, Heat and Power Co. (1931, c. 19); An Act to declare certain works of the Beauharnois Light, Heat and Power Company to be for the general advantage of Canada (1931, c. 20).

Section 3.—Publications of Dominion Departments.

List of Principal Publications of the Departments of the Government of the Dominion of Canada as Compiled from Information Supplied by the respective Departments.

NOTE.—A catalogue of the official publications of the Parliament and Government of Canada, stating prices, is issued regularly once a year, with supplements when required; copies may be obtained from the King's Printer, Ottawa.

Agriculture.—Annual Reports of the Minister, the Veterinary Director General, and progress reports of the Dominion Agrostologist, 1934-36, Dominion Apiarist, 1931-33, Dominion Bacteriologist, 1934-36, Dominion Botanist, 1931-34, Dominion Cerealists, 1934-37, Dominion Chemist, 1934-36, Dominion Field Husbandman, 1931-35, Dominion Horticulturist 1931-33, Dominion Poultry Husbandman, 1931-33, Economic Fibre Production, 1934-36, Experimental Fox Ranch, Summerside, 1931-34, Illustration Stations, 1931-33. Divisions of the Experimental Farms Branch. Progress Reports covering the work conducted on the Experimental Farms and Stations located at Agassiz, B.C., 1931-35, Brandon, Man., 1931-36, Beaverlodge, Alta., 1931-36, Cap Rouge, Que., 1933-36, Charlottetown, P.E.I., 1932-36, Farnham, Que., 1931-35, Fredericton, N.B., 1931-36, Harrow and Delhi, Ont., 1932-36, Indian Head and Sutherland, Sask., 1932-36, Indian Head, Sask., 1932-36, Kapuskasing, Ont., 1931-36, Kentville, N.S., 1931-36, Lacombe, Alta., 1932-36, L'Assomption, Que., 1930-36, Lennoxville, Que., 1931-36, Lethbridge, Alta., 1931-36, Manyberries, Alta., 1927-36, Nappan, N.S., 1932-36, Rosthern, Sask., 1931-36, Saanichton, B.C., 1932-36, Scott, Sask., 1931-36, Ste Anne de la Pocatière, Que., 1931-36, Summerland, B.C., 1932-36, Summerside Fox Ranch, P.E.I., 1931-34, Swift Current, Sask., 1931-36, Windermere, B.C., 1931-36. Bulletins and circulars of the Experimental Farms Branch on a great variety of agricultural subjects, including publications of the following Divisions: Field Husbandry; Animal Husbandry; Horticulture; Cereal; Chemistry; Forage Plants; Botanical; Poultry; Tobacco; Economic Fibre; Bacteriology; Bees; and Illustration Stations. Bulletins of the Dairy and Cold Storage Branch relating to the dairying and cold storage industries in Canada, the making of butter and cheese, dairying experiments, co-operation, etc. Reports, bulletins, circulars,

etc., of the Live Stock Branch on cattle, sheep, swine, and poultry, marketing of eggs, wool, etc. Bulletins of the Health of Animals Branch, with regulations as to: contagious abortion; rabies; sheep scab; actinomycosis; anthrax; glanders; hog cholera; tuberculosis; foot and mouth disease; quarantine; and meat inspection. Bulletins and reports of the Seed Branch as to seed-testing, the production and use of seed grains, the Seed Control Act, the Feeding Stuffs Act and the Fertilizers Act. Bulletins and circulars of the Entomological Branch and instructions to importers of nursery stock. Fruit Branch reports relating to the marketing of fruits and vegetables and their preservation, the Fruit and Honey Act and the Maple Sugar Industry Act.

A pamphlet entitled "Departmental Directory and List of Publications" contains a list of the publications of the Department, numbering more than 300. These publications include, in addition to the reports, bulletins, and circulars on field crops, live stock, dairying, orchard and garden, animal, insect, and plant diseases, bee-keeping, poultry, and miscellaneous topics. With few exceptions, the publications of the Department are free on application to its Publicity and Extension Branch.

Auditor General.—Annual Report.

Board of Railway Commissioners for Canada.—Annual Report. Pamphlet containing Judgments, Orders, Regulations, and Rulings, issued fortnightly.

Civil Service Commission.—Annual Report. Regulations of the Civil Service Commission. The Classification of the Civil Service of Canada. How Appointments are made in the Public Service. Examinations for Clerks, Stenographers, and Typists. Examinations for Custom Service. Examinations for Postal Service. Examinations for Junior Trade Commissioners. Positions exempted from the Civil Service Act.

External Affairs.—Annual Report. Annual Treaty Series. British and Foreign Government Representatives in Canada. Report of the Canadian Delegates to the Assembly of the League of Nations.

Finance.—Annual Report on the Public Accounts of the Dominion of Canada. Monthly Statements of the Chartered Banks of Canada. Estimates. Particulars of Dominion of Canada Loans Outstanding. Reprint of the Budget Speech of the Minister of Finance. Report on the Administration of Old Age Pensions in Canada. Report on Dominion Subsidies and Grants to Provinces of Canada.

Fisheries.—(*Publications marked * are available in both English and French editions.*) *Annual Report, including Fish Culture Report. Annual Statistical Report (contains both English and French sections). Fish Culture Report. Popular Account of a Number of Canadian Fishes—A. Halkett. *Canada's Fisheries. Map of the Atlantic Coast Provinces showing the Inshore and Deep-Sea Fishing Grounds. Statistics of the Haddock Fishery in North American Waters—A. W. H. Needler. Statistics of the Catch of Cod off the East Coast of North America, 1926—O. E. Sette. Statistics of the Mackerel Fishery off the East Coast of North America, 1804 to 1930—O. E. Sette and A. W. H. Needler. Discoloration, Smut or Blackening of Canned Lobsters—Harrison and Hood. Historical Account of the Lobster-Canning Industry—R. H. Williams. *Fish Canning in Canada (non-technical). *Fisheries News Bulletin (monthly). *The Salmon Fishery of British Columbia. Report on Fisheries Investigations in Hudson Bay, 1930. *Summary of the Report by Messrs. Cockfield, Brown and Company, Limited, on the Marketing of Canadian Fish and Fish Products. *Oyster Farming on the Atlantic Coast of Canada. Hardening Mud Bottoms for Oyster Culture (mimeographed). Factors in the Shipment of Live Lobsters from Eastern Nova Scotia. Investigations into the Natural History of the Herring—Hjort. *The Life of the Atlantic Salmon. *Proceedings No. 1 of the North American Council on Fishery Investigations, 1921-30, and *Proceedings No. 2, 1931-33. *Report of the Royal Commission Investigating the Fisheries of the Maritime Provinces and the Magdalen Islands, 1927. *The Storage of Oysters—A. W. H. Needler. Check List of the Fishes of the Dominion of Canada and Newfoundland, illustrated (\$2)—A. Halkett. *Any Day a Fish Day (fish cooking hints and recipes). *Memoranda (mimeographed) dealing with some methods of fish processing.

NOTE.—*Publications of the Department of Fisheries are distributed at the discretion of the Department and applicants for any papers should indicate the purposes for which they are desired. In some cases charges may be made.*

Insurance.—Quarterly Statement showing List of Registered Insurance Companies. Annual Abstract of Statements of Registered Insurance Companies (subject to correction); Annual Reports of the Insurance Department, Vol. I (Fire and Miscellaneous), Vol. II (Life Companies and Fraternal Benefit Societies). Annual List of Securities held by Insurance, Trust and Loan Companies, with Department's Valuation thereof. Annual Abstract of Statements of Loan, Small Loan and Trust Companies (subject to correction). Annual Report of Loan, Small Loan and Trust Companies. Classification of Fire Insurance Risks. Table of Bond Values.

Justice.—Annual Report of the Superintendent of Penitentiaries.

King's Printer and Controller of Stationery.—The Canada Gazette, published weekly, with occasional supplement and extras; subscription, in Canada and United States, \$8 per annum payable in advance, single copies 20 cents each, other countries \$10 per annum and 25 cents per single copy. Judgments of the Board of Railway Commissioners, semi-monthly, \$3 per annum, single copies, 20 cents. Canada Law Reports, published monthly, yearly subscription, \$6. Revised Statutes of Canada, 1927 (5 vols.), \$10. Annual Statutes, 1928-37, \$5 each. Acts, Public and Private, with Amendments to date, 10 cents to \$1 per copy. Canadian Postal Guide, \$1 including supplements, additional 25 cents. Parliamentary Debates, "Hansard", issued daily during session, French and English, \$3 per session each for House of Commons and Senate Debates; single copies, 5 cents.

NOTE.—Prices of bluebooks are in nearly every case printed upon the front cover and are based practically on cost. They may be ordered direct from the King's Printer, Ottawa. A catalogue of official publications of the Parliament and Government of Canada is issued regularly once a year with supplements when required and copies may be obtained from the King's Printer, Ottawa.

Labour.—Monthly.—The Labour Gazette (published in English and French) at a subscription price of 20 cents per annum, postage prepaid, to subscribers in Canada, the United States of America, and Mexico, and of \$1 per annum to subscribers in all other countries. Annual.—Report of the Department of Labour (including: Reports of Proceedings under the Industrial Disputes Investigation Act, Conciliation and Labour Act, Employment Offices Co-ordination Act, Technical Education Act, Government Annuities Act, Fair Wages and Hours of Labour Act, and the Relief Legislation). Labour Legislation in Canada as existing on Dec. 31, 1928 (a supplementary report thereto on Labour Legislation is published annually in February or March). Labour Organization in Canada. Organization in Industry, Commerce, and the Professions in Canada. Wages and Hours of Labour in Canada. Prices in Canada and other Countries. Strikes and Lockouts in Canada and other Countries. Interim Report of the National Employment Commission. Final Report of the National Employment Commission. General Reports.—Judicial Proceedings respecting Constitutional Validity of the Industrial Disputes Investigation Act, 1907, and Amendments of 1910, 1918, 1920, and 1925. The Employment of Children and Young Persons in Canada. Trade Union Law in Canada. Reports of Investigations under the Combines Investigation Act.—(1) Investigation into Alleged Combine in the Distribution of Fruits and Vegetables in Western Canada, 1925; (2) Investigation into Alleged Combine limiting Competition in the Marketing of New Brunswick Potatoes, 1925; (3) Investigation into Alleged Combine in the Manufacture and Sale of Bread in the City of Montreal, 1926; (4) Investigation into Alleged Combine in the Distribution of Fruits and Vegetables produced in Ontario, 1926; (5) Investigation by Registrar into the Proprietary Articles Trade Association, 1926; (6) Investigation by Commissioner into the Proprietary Articles Trade Association, 1927; (7) Report of the Commissioner on the Amalgamated Builders' Council, 1929; (8) Report of Commissioner on the Electrical Estimators' Association, 1930; (9) Report of Registrar into Alleged Combine in the Bread-Baking Industry in Canada, 1931; (10) Report of Commissioner on Alleged Combine in the Motion Picture Industry in Canada, 1931; (11) Report of Registrar on Tobacco Manufacturers and Other Buyers of Raw Leaf Tobacco in Ontario, 1933; (12) Report of Registrar on the Importation and Distribution of British Anthracite Coal in Canada, 1933. *Bulletins in Industrial Relations Series.*—(1) Joint Councils in Industry; (2) Report of a Conference on Industrial Relations, 1921; (3) Joint Conference of the Building and Construction Industries in Canada, 1921; (5) Canada and the International Labour Conference; (7) Canadian Railway Board of Adjustment, No. 1, Second Report; (8) National Conference Regarding Winter Employment in Canada, 1924; (9) Canadian Railway Board of Adjustment, No. 1, Third Report; (10) Canadian Railway Board of Adjustment, No. 1, Fourth Report; (11) Government Intervention in Labour Disputes in Canada; (12) Canadian Railway Board of Adjustment, No. 1, Fifth Report; (13) Canadian Railway Board of Adjustment, No. 1, Sixth Report.

Mines and Resources.—

DEPARTMENTAL.—Annual Report of the Department of Mines and Resources for fiscal years.

(Applications for publications, other than the Annual Report, should be addressed to the Directors of the Branches concerned).

Mines and Geology Branch.—THE BUREAU OF GEOLOGY AND TOPOGRAPHY.—(Memoirs descriptive of the geology of areas examined in detail); Economic Geology Series, (containing a summary of information on economic subjects from published reports, which is supplemented in some cases by field studies); preliminary reports and maps on field studies; small and large scale geological and topographical maps on areas examined.

THE BUREAU OF MINES.—Half-yearly reports of Investigations in Ore Dressing and Metallurgy; Annual Review (by calendar years) of the Canadian Mineral Industry; Separate reviews of the various minerals; Monographs on mineral technology; the Annual Report of the Explosives Division.

THE NATIONAL MUSEUM OF CANADA.—Annual Reports for fiscal years; museum bulletins dealing with anthropology, ornithology, zoology, and botany.

GEOGRAPHIC BOARD OF CANADA.—Reports containing all decisions of the Board, with reference to place names and their meanings. (*No reports have been published for several years.*)

Lands, Parks and Forests Branch.—Annual Reports of Branch; descriptive pamphlets, bulletins, folders, etc., relating to the Northwest Territories and Yukon, Dominion Forest Service, National Parks (including historic sites), and the administration of the Migratory Birds Convention Act.

Surveys and Engineering Branch.—Publications dealing with the work of the Dominion Observatories, Ottawa; Dominion Astrophysical Observatory, Victoria; Dominion Water and Power Bureau; Geodetic Service of Canada; Hydrographic and Map Service; International Boundary Commission.

Immigration Branch.—Annual Reports.

Indian Affairs Branch.—Annual Reports for fiscal years. Publications include: Schedule of Indian Reserves, 1928, Price \$1. Indian Treaties and Surrenders, Vols. I, II and III, Price \$15. Census of Indians in Canada, 1934.

National Defence.—Annual Report; List of Officers, Defence Forces of Canada, Naval, Military and Air Services; Canadian Navy List; Naval General Orders; General Orders, Militia and Air Services; Militia Orders; Air Regulations.

National Research Council.—*Annual Reports.*—Reports of the National Research Council for the years 1917-18 to 1935-36. *Technical Reports.*—(For Nos. 1 to 21 see p. 1042 of the 1927-28 Year Book; Nos. 3, 4, 6, 8 and 12 are now out of print.) No. 22, An Experimental Study of Sieving, by J. B. Porter; No. 23, The Storage of Apples in Air-cooled Warehouses in Nova Scotia, by S. G. Lipsett, covering investigation by the Associate Committee on Fruit Storage; No. 24, The Drying of Wheat, covering an investigation by the Associate Committee on Grain Research; No. 25, The Drying of Wheat (Second Report), by E. Stansfield and W. H. Cook, covering an investigation under the Associate Committee on Grain Research; No. 26, Weed Survey of the Prairie Provinces, by J. M. Manson, prepared under the auspices of the Associate Committee on Weed Control; No. 27, Weeds and Their Control, by G. P. McRostie, L. E. Kirk, G. Godel, W. G. Smith and J. M. Manson; No. 28, The Comparative Feeding Values for Live Stock of Barley, Oats, Wheat, Rye, and Corn, by E. W. Crampton; No. 29, The Comparative Feeding Values for Poultry of Barley, Oats, Wheat, Rye, and Corn, by E. W. Crampton. The series of Technical Reports has been discontinued. Future publications will appear as bulletins. *Bulletins.*—(For Nos. 1 to 12 see p. 1042 of the 1927-28 Year Book; Nos. 3, 4, 6, 7, 9 and 11 are now out of print.) No. 13, Interim Report on Protein Content as a Factor in Grading Wheat, prepared by the Associate Committee on Grain Research; No. 14, Report on Inquiry in Europe Regarding the Feasibility of Using Protein Content as a Factor in Grading and Marketing Canadian Wheat, by R. Newton; No. 15, Review of Literature dealing with Health Hazards in Spray Painting, submitted by the Associate Committee on Spray Painting; No. 16, Health Hazards in the Radium Industry, by John D. Leitch; No. 17, Radium Dosage, by G. C. Laurence. No. 18, Chemical Weed Killers, by Dr. W. H. Cook and A. C. Halferdahl; No. 19, Peaux et Cuirs, by W. E. Graham. A bulletin entitled "The Use of Wax in the Plucking of Poultry" by Dr. N. H. Grace has been published jointly by the National Research Council and the Dominion Department of Agriculture. In addition to the foregoing list of printed reports and bulletins issued by the Council, 53 reports have been mimeographed and 263 typewritten. (*Specially prepared and intended only for limited distribution.*) *Periodical.*—Canadian Journal of Research, at present issued in two parts, devoted, respectively, to (a) physical and chemical sciences and (b) botanical and zoological sciences.

NOTE.—The above list includes the regular publications of the Research Council. Many special papers and publications are also issued. For further information re these, application should be made to the Director of Research Information.

National Revenue.—Annual Report, containing statements relative to Imports, Exports, Excise, and Income. Annual Report of Shipping. National Revenue Review (monthly).

Pensions and National Health.—(1) Sanitation—Sewage Treatment for Isolated Houses and Small Institutions where Municipal Sewage System is not available; (2) The Canadian Mother's Book; (17) Wells; (18) Home Treatment, Rural Water Supplies; (19) Athletes' Foot; (22) A Survey of Vitamins; (24) Information for Men—Syphilis and Gonorrhoea; (25) Information for Young Women about Sex Hygiene; (26) Information for Parents—Teaching Sexual Hygiene to Children; (27) Prevention of Blindness in Babies; (29a) Goitre—Facts for the General Public; (30) How to Build Sound Teeth; (31) What You Should Know about Tuberculosis; (32) Smallpox and Vaccination; (34) The Rat Menace; (51) Infantile Paralysis.

Post Office.—Annual Report of the Postmaster General. Official Postal Guide. Regulations as to Rural Mail Delivery. Booklet of Postal Information.

Public Archives.—*Annual Reports*.¹—1914-15 (60 cents); 1921 (30 cents); 1923 (55 cents); 1926 (10 cents); 1928 (25 cents); 1929 (50 cents); 1930 (50 cents); 1931 (\$1); 1932 (\$1); 1933 (\$1); 1934 (10 cents); 1935 (\$1); 1936 (\$1).

Numbered Publications.—No. 9, Early Canadian Northwest Legislation—Oliver (2 Vols.) (1914-15), \$2; No. 12, Reports on the Laws of Quebec, 1767-70—Kennedy and Lanctôt (1931), \$1; No. 13, Vol. I, Catalogue of Pamphlets,² 1493-1877—Casey (1931), \$1; Vol. II, Catalogue of Pamphlets,² 1878-1931—Casey (1932), \$1.

Special Publications.—(h) Documents—Constitutional History of Canada, 1759-91—Shortt and Doughty, 2 ed. (2 Vols.), (1918), \$2; (i) Catalogue of Pictures, etc.,³ Part I, Sec. 1—Kenney (1925), \$2.50; (j) Documents—Canadian Currency, Exchange, etc., during the French Period⁴—Shortt (2 Vols.), (1925-26), \$3; (l) The Kelsey Papers⁵ (Hudson Bay Co. Journals, 1683-1722)—Doughty and Martin (1929), \$2; (m) Documents—Currency in Nova Scotia⁶ 1675-1758—Shortt, Johnston, Lanctôt (1933), \$2; (n) Documents—Constitutional History of Canada, 1819-28—Doughty and Story (1935), \$2.

¹ Contain texts, calendars, and catalogues of documents as well as reports on the administrative work of the Divisions. ² Title page and introduction in English and French, same volume; titles of pamphlets as in original; index in English. ³ Title, preface, and introduction in English and French in same volume; notes in English; titles of pictures exact. ⁴ Complete volumes, including index, in English and French in same volume. ⁵ Title and introduction in English and French in same volume; notes and index in English; texts of journals as in original (English) exact. ⁶ Title and foreword in English and French, otherwise in English only.

Public Works.—Annual Report.

Secretary of State.—Annual Report. The Arms of Canada. The Canadian Patent Office Record, Annual Report of the Commissioner of Patents.

Trade and Commerce.—*Annual Report of the Dept. of Trade and Commerce, Price 25 cents; *Annual Report of the Board of Grain Commissioners for Canada, Price 25 cents; *Annual Report of Electricity and Gas, Price 25 cents; Annual Reports of Dominion Grain Research Laboratory; *List of Licensed Elevators, etc., Price 50 cents; Motion Pictures (catalogue of), Price 25 cents.

NOTE.—Requests for those of the above publications marked with an asterisk should be addressed to the King's Printer; the remaining publications may be obtained from the Deputy Minister, Department of Trade and Commerce.

Commercial Intelligence Service.—Commercial Intelligence Journal.—Published weekly in English and French, containing reports of Trade Commissioners and other commercial information. Annual subscription, Canada, \$1, outside Canada, \$3.50.

NOTE.—Publications of the Commercial Intelligence Service are compiled with a view to furnishing Canadian exporters with information respecting the possibilities for the sale of Canadian goods abroad, the nature of the competition to be encountered, Customs requirements, etc., and are not intended for general distribution. The publications available include leaflets giving Invoice Requirements and a series on Points for Exporters, both covering countries included in the territories assigned to Trade Commissioners. From time to time special reports are issued separately, which subscribers to the Commercial Intelligence Journal are entitled to receive free of charge. In all other cases their distribution is controlled by the King's Printer, who fixes a price therefor.

Dominion Bureau of Statistics.—(For the publications of the Dominion Bureau of Statistics see pp. 1073 to 1086).

Transport.—*Canal Services.*—Annual Report of the Department of Transport, Price 50 cents. Canals of Canada, Price 10 cents. The Trent Canal System, Price 10 cents. Canal Rules and Regulations, Price 10 cents. Churchill and the Hudson Bay, Price 10 cents. Welland Ship Canal, 1934, Price 10 cents.

(Obtainable from the Assistant Deputy Minister and Secretary, Department of Transport, Ottawa)—The Quebec Bridge, 2 Vols., Price \$5. The Welland Ship Canal, 1913-33, Price \$10. St. Lawrence Waterway Project, Report of Joint Board of Engineers, with plates, Price \$5. Report of Conference of Canadian Engineers on the International Rapids Section, Price \$2.50. Report of Joint Board of Engineers (reconvened), Price \$2.50.

Marine Services.—Annual Report, Department of Marine (now Department of Transport), Price 25 cents. International Convention Respecting Load Lines, etc., Price 50 cents. International Convention for the Safety of Life at Sea, Price 25 cents. List of Canadian Shipping, Price 50 cents. Load Line Regulations, 1932, Price 10 cents. Regulations for the Examination of Seamen and Others for Certificates of Efficiency of Life-boatmen, Price 10 cents. List of Lights, etc., in Canada: (a) Pacific Coast, Price 15 cents; (b) Atlantic Coast, Price 25 cents; (c) Inland Waters, Price 10 cents.

(Obtainable from the King's Printer, Ottawa)—Regulations, Government Wharves in Canada (French and English), *Price 10 cents*. Rules and Regulations Relating to the Examination of Masters and Mates of Foreign Sea-Going Ships (French and English), *Price 25 cents*. Rules and Regulations Relating to the Examination of Masters and Mates of Coasting and Inland Vessels (French and English), *Price 25 cents*. Rules of the Road, International (French and English), *Price 10 cents*. Rules of the Road, Great Lakes (French and English), *Price 10 cents*. Tide Tables, St. Lawrence Ship Channel (French and English), *Price 25 cents*. Regulations for Shipping Grain Cargoes, *Price 10 cents*. Expedition to Hudson Bay, N.B. McLean, Director in Charge, 1927-28, *Price 50 cents*. Inspection of Boilers and Machinery of Steamships (French and English), *Price 10 cents*. Rules for Life-Saving Appliances (French and English), *Price 10 cents*. Rules for Inspection of Hulls and Equipment (English only), *Price 10 cents*. Rules for Motor Engineers' Certificates (English only), *Price 10 cents*. Rules for Examination of Engineers on Steamships (French and English), *Price 10 cents*. Rules for Fire Extinguishers on Steamships (English only), *Price 10 cents*. Rules for Harbour Masters (English only), *Price 10 cents*.

(Obtainable from the King's Printer, Government Printing Bureau, Ottawa) International Tele-Communication Convention of Madrid, 1932, together with Communication Regulations annexed thereto, *Price 25 cents*. Radiotelegraphy Requirements for Ships registered in Canada and engaged on international voyages in accordance with the Safety of Life at Sea and Loadline Conventions Act, 1931, and the Regulations issued thereunder, *Price 10 cents*. Bulletin No. 2 (1932) Radio Inductive Interference, *Price 35 cents*. Supplement "A" (1934) to Bulletin No. 2, *Price 15 cents*. Navigation Conditions on the Hudson Bay Route from the Atlantic Seaboard to Fort Churchill, seasons of navigation 1929-35, *Price 10 cents*. Hudson Bay Report, 1927, *Price 25 cents*.

Air Services.—(Obtainable from the Chief of Air Services, Department of Transport, Ottawa). Air Regulations, Canada, *Free*. Map Showing Radio Stations Operated as Aids to Navigation, 1935, *Price 25 cents*. British Postmaster General's Handbook for Wireless Telegraph Operators, *Price 25 cents*. Official List of Radio Stations in Canada, *Price 25 cents*. Kilocycle-Metre Conversion Chart, *Price 10 cents*. Radiotelegraph Act and Regulations issued thereunder, *Price 10 cents*. Pamphlet containing Extracts from the Radiotelegraph Act and Regulations issued thereunder with reference to Amateur Experimental Radio Stations, *Free*. Notices to Mariners *re*: Weather, Ice, and Other Reports Transmitted by Radio-Telegraph, *Free*. Pamphlets containing Examination Procedure for Certificates of Proficiency in Radio for Commercial Operators, *Free*.

(Obtainable from the Meteorological Office, 315 Bloor Street West, Toronto (5), Ontario)—Monthly Record of Meteorological Observations in Canada and Newfoundland, *single copies, Price 10 cents, yearly subscription \$1*. Monthly Weather Map, *single copies, Price 10 cents, yearly subscription \$1*. Daily Weather Map—Toronto edition, *yearly subscription, Price \$4*. Annual Reports (1895-1915), *Price \$1*.

(Obtainable from the Meteorological Office, 1178 Grain Exchange Building, Winnipeg, Manitoba). Daily Weather Map—Winnipeg edition (includes weekly bulletin during agricultural season), *yearly subscription, Price \$4*.

Canadian Travel Bureau.—Canada Your Friendly Neighbor Invites You; How to Enter Canada; Canada (recreational folder); Sport Fishing in Canada; Canada's Game Fields; Canoe Trips in Canada; Canoe Trips to Hudson Bay; Canada and United States Road Map, General, Eastern, Central and Western sheets.

Section 4.—Publications of Provincial Governments.

PRINCE EDWARD ISLAND

Journal of the Legislative Assembly. Statutes. Royal Gazette. Annual Reports of the Provincial Auditor on Public Accounts, Departments of Public Works and Highways, Education, Agriculture, Falconwood Hospital (for the Insane) and Provincial Infirmary, Vital Statistics and Public Health.

NOVA SCOTIA.

Royal Gazette. Statutes, Journal and Proceedings of the House of Assembly. Journal of Education. Manual of the Public Instruction Acts and Regulations of the Council of Public Instruction. *Annual Reports.*—Public Accounts; Public Health (including Vital Statistics, Humane Institutions, Penal Institutions, Child Welfare, Nova Scotia Training School for Mental Defectives, Victoria General Hospital, Nova Scotia Hospital, Nova Scotia Sanatorium, Mothers' Allowances, Old Age Pensions); Education; Fire Marshal; Mines; Provincial Museum and Science Library; Public Archives; Legislative Library; Provincial Secretary (including Rural Telephone Companies, Board of Censors); Department of Agriculture; Department of Highways; Department of Lands and Forests; Department of Labour (including Minimum Wage Board, Employment Service Offices, Inspection of Factories, Unemployment Relief); Statistics of Incorporated Cities, Towns and Municipalities; Printing; Transient Poor; Public Utilities Board; Workmen's Compensation Board; the

Power Commission; Liquor Control Commission; Nova Scotia Housing Commission; Royal Canadian Mounted Police (Nova Scotia section). *Special Reports*.—Milk and Cream Inquiry; Franchise Inquiry; Investigation into workings of Compensation Board; Submission by the Government of Nova Scotia to the Royal Commission on Dominion-Provincial Financial Relation.

NEW BRUNSWICK.

Royal Gazette. Statutes. Annual Reports of the Comptroller General, of the Board of Health, of the Department of Education and Agriculture (including Horticulture). Annual Reports on Public Works, Crown Lands, the Hospital for the Insane; Report of the Jordan Memorial Tuberculosis Sanatorium at River Glade; Report of Women's Institutes; Report of the Workmen's Compensation Board; Report of Public Utilities Commission; Report of New Brunswick Hydro-Electric Power Commission; Boys' Industrial Home, Saint John, Report; New Brunswick Liquor Control Board Report; Old Age Pensions Board Report; New Brunswick Fire Prevention Board Report; Motor Carrier Board Report; Department of Federal and Municipal Relations Report; and Report of Fair Wage Board.

QUEBEC.

NOTE.—The titles of publications available in the English language are printed in English.

Attorney General.—Annual List of Public Officers of the Province of Quebec.

Tourist Bureau.—(Publications marked (1) are bilingual; (2) Separate French and English editions; (3) English only.)

(1) Official Highway and Tourist Map (yearly); (3) Tours in Quebec (80 pp. guide, illustrated); (3) The Gaspé Peninsula (32 pp. de luxe booklet); (2) Gaspé Peninsula (260 pp.—Complete guide—illustrated); (2) Along Quebec Highways (900 pp.—illustrated—Price \$2); (3) The St. Maurice Valley (24 pp. illustrated); Québec et ses Régions de Tourisme (24 pp.—illustrated booklet); (3) Hunting and Fishing in Quebec.

Municipal Affairs, Trade and Commerce.—Annual Report of the Minister of Municipal Affairs; List of Municipal Corporations (annual); Statistical Year Book; Education Statistics; Financial Statistics of School Corporations; Municipal Statistics (annual); Meteorological Bulletin (monthly); Butter and Cheese Production (monthly); Agricultural Statistics reports; Co-operative People's Banks and Agricultural and Co-operative Societies.

Health and Provincial Secretary.—Annual Report of the Secretary and Registrar; Annual Report of the Department of Health; the Quebec Official Gazette, bilingual (weekly); The Statutes of the Province (annual); Revised Statutes of the Province (1925); Rapport de l'Archiviste (annual); Monuments commémoratifs de la province de Québec—P.-G. Roy; Report of the Director of Public Charities.

Treasury.—Annual Statement of Public Accounts; Annual Estimates; Annual Budget Speech; Annual Report on Insurance Companies; Annual Report on Mutual Benefit Associations; Annual Report on Trust Companies.

Bureau of Revenue.—Annual Report of the Quebec Liquor Commission; Annual Report of Motor Vehicle Registrations; Statistics of Automobile Accidents.

Lands and Forests.—Annual Report of the Minister; Circular No. 1, La rouille vesiculaire du pin blanc—G.-C. Piché; Nomenclature of the Geographical Names in the Province of Quebec, Quebec Geographical Commission; Dictionnaire des Lacs et Rivières; Annual Report of the Quebec Streams Commission; Notes on the Forests of Quebec—G.-C. Piché; Rapport du Service de Protection; Tableau des forces hydrauliques concédées de 1867 à 1923 (Supplément 1923 au 7 avril 1930); Forests and Waterfalls; Quebec, Natural Resources.

Agriculture.—*Annual Reports*.—Department of Agriculture; Competition for Agricultural Merit; Dairymen's Association; Pomological Society; Society for Protection of Plants. *Bulletins*.—(55) Poultry Raising in Towns and Villages; (40) How to plant your Fruit trees; (44) Vegetable Culture; (78) Farm Gas Engines; (89) The Drainage of Farm Lands; (90) Experiments with Grain Crops; (92) The Corn Borer; (95) Farm Account Book; (100) Soils Drainage; (114) La taille du pommier; (115) Vegetable Garden; (116) Swine Feeding; (117) Contagious Abortion; (118) Guide de la protection des cultures; (122) Culture du tabac; (123) Cueillette et emballage des pommes; (124) Arrosage du verger commercial (French and English); (125) Culture de la tomate, du piment et des aubergines; (127) Plantation d'un verger commercial; (128) Greenhouses, Hotbeds and Shelters; (129) Les cours d'eau municipaux; (130) Comment lutter contre le ver blanc; (131) Le pain de ménage; (132) La culture des fraises; (134) L'industrie du sucre d'érable dans la province de Québec. (135) Les arrosages du verger; (136) Mangeons plus de légumes; (137) Polyarthrite du poulain. *Circulars*.—(42) Sélection des troupeaux de volailles; (125) Guide des cercles de fermières; (65) Common Weeds and their Control; (66) Alfalfa Growing in Quebec. *Miscellaneous*.—(293) The Maple, Pride of Quebec.

Highways.—Annual Report of the Minister of Highways (bilingual); An Act Respecting the Roads Department (1934), (separate French and English editions).

Mines and Fisheries.—Extracts from Reports on the District of Ungava, by T. C. Denis (1929); Report on the Copper Deposits of the Eastern Townships, by J. Austen Bancroft (1916); L'industrie de l'amiante dans la province de Québec (1917); Geological Sketch and Economic Minerals of the Province of Quebec (1924); Annual Reports on Mining Operations in the Province of Quebec; Annual Reports of the Quebec Bureau of Mines, years 1929 to 1936; Fisherman's Paradise; The Laurentide National Park; Elevage du rat musqué; Fur Farming in the Province of Quebec, 1921.

Colonization.—Annual Report of the Minister; Le Guide du Colon, 1932; Quebec Ready Reference.

Labour.—Minister's Report; Workmen's Compensation Act; Annual Report of the Workmen's Compensation Commission; Report of the Quebec Social Insurance Commission.

Public Works.—Minister's Report; Statistics of Fire Losses in the Province.

Public Instruction.—Code scolaire (1927); The Education Act (1911); Regulations of the Catholic Committee (1936); Regulations of the Protestant Committee (1921); Memoranda of Instructions to Teachers for Intermediate and High Schools (1934); Annual Report; Financial Statement of the Superintendent of Public Instruction (annual); Mon premier livre (1st and 2nd parts) (1900), a new edition of which is printed every year; l'Enseignement primaire; Educational Record; Yearly circulars containing Instructions to School Boards and School Inspectors; Course of English and French for English Catholic Schools (1926); Manual respecting the course of study in the Protestant Elementary Schools; List of authorized text books.

Legislative Council.—Agenda Paper of the Legislative Council; Votes and Proceedings of the Legislative Council; Journals of the Legislative Council; Rules and Regulations of the Legislative Council.

Legislative Assembly.—Agenda Paper of the Legislative Assembly; Votes and Proceedings of the Legislative Assembly; Journals of the Legislative Assembly; Sessional Papers, Departmental Reports and Returns to Orders and Addresses of the Legislative Assembly; Report of the Clerk of the Crown in Chancery on Elections (published after every general election); Report of the Librarian of the Legislature; Annotated Rules and Standing Orders of the Legislative Assembly of Quebec; Private Bills in the Legislative Assembly of Quebec (a manual containing the rules relative to); Government and Legislature; List of the Chairmen and Members of the Committees of the Legislative Assembly.

ONTARIO.

Agriculture.—*Annual Reports.*—Minister of Agriculture; Agricultural College and Experimental Farm; Agricultural and Experimental Union; Stallion Enrolment Board; Agricultural Statistics; Vegetable Growers' Association; Entomological Society; Agricultural Societies; Horticultural Societies; Annual Report of Ontario Veterinary College. *Bulletins.*—**FRUITS.**—(335) The Strawberry in Ontario (rev. 1936); (342) Fire Blight (1929); (354) The Pear (1930); (355) The Raspberry and Blackberry (rev. 1936); (356) Insects Attacking Fruit Trees (1930); (383) Peach Yellow and Little Peach; (389) V. Peaches. **GENERAL FARMING.**—(218) Birds of Ontario in Relation to Agriculture, *Price 25 cents*; (277) Motor Transportation in Rural Ontario (1920); (296) Sweet Clover (rev. 1928); (326) Farm Barns (1927); (331) Public Speaking and Debate (1933); (348) Amateur Dramatics (1929); (349) Grain Smuts; (360) Farm Underdrainage (1931); (364) Manures and Fertilizers (1931); (370) Testing Milk, Cream, and Dairy By-Products on the Farm and in the Factory; (371) Buttermaking on the Farm (1936); (372) Soft Cheese Making and Farm Dairy Cheddar Cheese (1936); (374) Use More Ontario Honey (1933); (385) Cheese Mites and Their Control (1937); (327) Knots and Splices; Rope on the Farm (rev. 1937). **LIVESTOCK.**—(304) Infectious Abortion of Cattle (rev. 1933); (337) Parasites Injurious to Sheep (1928); (338) Hints on Judging (1931); (350) The Warble Flies (1934); (367) Pork on the Farm (1932); (373) Dairy Cattle (1933); (378) Bot Flies and Their Control (1934); (380) Parasites Injurious to Swine (rev. 1936); (387) Swine Diseases and Their Prevention; Swine Feeding. **POULTRY.**—(305) Diseases of Poultry (1932); (363) Parasites Injurious to Poultry (1931); (379) Farm Poultry (rev. 1935). **VEGETABLES.**—(358) The European Corn Borer (1931); (375) Ontario Grown Leaf Lettuce (1933); (386) Vegetable Diseases; (388) Vegetable Gardening; (390) Potatoes. **BEES.**—(384) Bee Diseases (1933). *Circulars.*—(8) Back-Yard Pig Feeding; (10) Varieties of Farm Crops; (15) Livestock Shipping Association; (16) Home Pasteurizing of Milk; (38) Cream before Pasteurization as a Factor in Butter-making; (39) Beef Rings; (41) Sweet Clover; (51) Perennial Sow Thistle; (52) Liver Disease of Horses; (54) Dodder; (55) Home Mixing of Fertilizers; Navel Ills of Foals. *Specials.*—An Economic Analysis of Cheese Factory Operations in Ontario; Co-operative Marketing; Destruction of Wolves; Farm Account Book,

Price 25 cents; Fertilizer Recommendations; Fruits of Ontario, *Price 50 cents*; Probable Causes and the Remedies for Defects in Second Grade Cream; The Value of Birds to Man; Tobacco Soils in Norfolk County. *Acts*.—Ditches and Water Course Act; Weed Control Act.

Attorney General.—Reports of Inspectors; Legal Officers; Registry Offices; Insurance; Loan and Trust Corporations; Division Courts; Annual Report of Commissioner of Provincial Police; Powers and Duties of Justices of the Peace in Ontario (handbook).

Education.—Annual Report of the Minister of Education; School Acts; Regulations and Courses of Study: (1) Public and Separate Schools, (2) Continuation Schools, (3) High Schools and Collegiate Institutes; Courses of Study and Examinations in Schools Attended by French-speaking Pupils; General Announcement of Summer Courses; Text Book Regulations, including list of text books authorized and their prices; The list of school manuals with their prices; Summer Schools for training of Teachers; Regulations and Courses of Study of the University of Ottawa Normal School; Syllabus of Normal School Courses and Regulations for First Class and Kindergarten-Primary Certificates; List of Teaching Days of High, Continuation, Public and Separate Schools; Recommendations and Regulations for Vocational Schools, etc.; Recommendations and Regulations for Agriculture and Household Science Departments; High School Entrance Examination Regulations; Annual Departmental Middle and Upper School Examinations; Announcement *re* the Carter Scholarships; The School Attendance Acts and the Recommendations and Regulations and the Part Time Courses; The Consolidation of Rural Schools; Regulations for Consolidated Schools; Accommodation, Equipment and Grants for Auxiliary Training Classes; Literature Selections for Departmental Examinations; Regulations, Medical and Dental Inspection, Public and Separate Schools; Schools and Teachers for the Province of Ontario, 1936.

Game and Fisheries.—Annual Report, Department of Game and Fisheries; The Game and Fisheries Act and Regulations; Summary of the Game and Fisheries Act and Regulations; Report of the Special Fish Committee, 1928-30; Report of the Special Game Committee, 1931-33; The Small Mouthed Black Bass and its Conservation; The Maskinonge and its Conservation; The Speckled Trout and its Conservation; Monthly Bulletin of the Department.

Health.—*Acts*.—The Public Health Act and the Vaccination Act; The Venereal Diseases Prevention Act; The Cemetery Act; The Public Hospitals Act; The Private Hospitals Act; The Sanatoria for Consumptives Act; The Maternity Boarding House Act; The Mental Hospitals Act, 1935; The Private Sanitarium Act; The Psychiatric Hospitals Act; Registration of Nurses Act; An Act Respecting the Fumigation of Premises; Milk Control Act, 1934. *Regulations*.—Regulations for the Control of Communicable Diseases; Regulations Respecting Venereal Diseases; Regulations Respecting the Manufacture of Non-Intoxicating Beverages, Distilled and Mineral Water, and the Manufacture of Syrups, Wines and Brewed Beer; Regulations for the Sanitary Control of Lumber and Mining Camps; Regulations Governing the Construction and Management of Swimming Pools; Regulations *re* Cross Connection of Water Supplies; Regulations pursuant to the Mental Hospitals Act, 1935; Regulations pursuant to the Public Hospitals Act; Regulations regarding Private Hospitals; Rules and Regulations relating to the Registration of Nurses; Regulations Respecting X-ray Examination, and Tuberculin Test for Nurses in Sanatoria and Public Hospitals; Regulations for the Use of Hydrocyanic Acid or Cyanide Compounds for Fumigation; Regulations relating to Convalescent Hospitals. *Publications*.—Annual Report upon the Public Hospitals, Private Hospitals, Hospitals for Incurables, Convalescent Hospitals, and Sanatoria for Consumptives; Annual Report of the Department of Health; Annual Report upon the Ontario Hospitals for the Mentally Ill, Mentally Sub-normal, and Epileptic. (*Pamphlets upon various subjects relating to Health may be obtained from the Department of Health, Parliament Buildings, Toronto.*)

Highways.—Annual Report; Annual Proceedings, Ontario Good Roads Association; Highway Traffic Act and Regulations (1937); General Specifications for Highway Bridges, Ontario, 1935; The Planting and Care of Roadside Trees; Public Commercial Vehicles Act, 1931, and Amendment, 1934; Public Vehicle Act and Regulations, 1930, and Amendment, 1935; Highway Improvement Act, 1935; Official Government Road Maps of Ontario; Weekly Bulletin on Road Conditions, *Free on application*; and County Maps, *Price 10 cents for each county*.

Labour.—*Legislation*.—Department of Labour Act; Factory, Shop and Office Building Act; Steam Boiler Act; Canadian Interprovincial Regulations for the Construction and Inspection of Boilers, Tanks and Apparatuses; Operating Engineers Act and Regulations Governing the Issuance of Certificates; Employment Agencies Act and Regulations Governing Employment Agencies; Apprenticeship Act and General Regulations Governing the Training of Apprentices in Designated Trades and Trade Regulations concerning each trade designated; Regulations Respecting the Protection of Persons Working in Compressed Air; Regulations Respecting the Protection of Persons Working in Tunnels or Open Caissons; Minimum Wage Act; Minimum Wage Orders; Industrial Standards Act and Schedules of Wages and Hours approved by Order in Council. *Reports*.—Annual Report of the Department of Labour, including the reports of the Ontario Government Offices of the Employ-

ment Service of Canada; Factory Inspection Branch; Boiler Inspection Branch; Board of Examiners of Operating Engineers, Apprenticeship Board, and the Minimum Wage Board. *Text Books*.—Why Certificates for Stationary and Hoisting Engineers; Boilers; Engines, Turbines, Condensers, Pumps; Refrigeration and Air Compression; Combustion; Beginners' Book on Power Plant Operation; Steam Plant Accessories.

Lands and Forests.—Annual Report; Pamphlet on Summer Resort Lands; Woodlots of Ontario; Forest Trees for Distribution; Forest Tree Planting; Settlers' Lands; Gathering Pine Cones; List of Townships; Forest Resources of Ontario.

Mines.—The Mining Act, R.S.O., 1937, revised. Handbook—Ontario's Mines and Mineral Resources, (sixth edition, 1936), Vol. XLVI, Part I, 1937; Report of the Mineral Production of Ontario in 1935; Report of Royal Ontario Nickel Commission, 1917, *Price \$5*; Report of Ontario Iron Ore Committee, 1923, *Price \$2*; Volume XXX, Part II, Ontario Gold Deposits; Volume XXXIII, Part II, 1924, Porcupine Gold Area, *Price \$2*; Final Report of Joint Peat Committee, 1925, *Price \$1*; Volume XXXVII, Part II, 1928, Kirkland Lake Gold Area, *Price \$2*; Bulletin No. 25, List of Publications (third edition), giving all reports issued up to March, 1932, with supplement to end of 1933; Bulletins Nos. 80 and 93, Money and the World Crisis; Prospector's Guide to Ontario Mining Fields (fourth edition, 1936).

Premier.—Reports of the Liquor Control Board of Ontario and the Temiskaming and Northern Ontario Railway Commission; Tourists' Handbook; Report of the Niagara Parks Commission; Ontario Research Foundation Report; Hydro-Electric Power Commission's Report.

Provincial Secretary.—*Annual Reports*.—Ontario Board of Parole; Prisons and Reformatories; Annual Report of the Secretary and Registrar of the Province of Ontario (this report is presented to the Legislative Assembly each year, but has not been printed for several years); The Companies Act, including the Extra-Provincial Corporations Act; The Mortmain and Charitable Uses Act; The Companies Information Act and the Corporation Securities Registration Act; The Marriage Act; The Vital Statistics Act; Physicians' Pocket Reference to the International List of Causes of Death; Annual Report of Births, Marriages and Deaths.

NOTE.—The Physicians' Pocket Reference to the International List of Causes of Death is published by the Dominion Bureau of Statistics, but copies are kept in this Branch for purposes of distribution.

Public Works.—Annual Report of the Minister, with reports of the Deputy Minister, Architect, Engineer, Secretary, and Accountant.

Treasury.—Annual Statements; Estimates of Expenditure; Public Accounts; Budget Address of Treasurer delivered in the Legislative Assembly; Auditors' Report; Report of the Board of Censors of Motion Pictures.

MANITOBA.

Agriculture.—*Booklets*.—Annual Crop and Live Stock Reports. *Bulletins and Circulars*.—Alfalfa and Sweet Clover Growing in Manitoba; Sweet Clover; The Trench Silo; Making Silage in Manitoba; The Canada Thistle; Leafy Spurge; Hoary Cress or Perennial Peppergrass; Noxious Weeds Act; Great Ragweed; Annual Forage Crops for Manitoba; Dog Mustard; Stinkweed and Common Wild Mustard; The Russian Thistle; The Gopher Pest in Manitoba; An Agricultural Program for Southwestern Manitoba; Crop History and Crop Outlook in the Melita Area; Sow Thistle Control; Control of Wild Oats; Preparing Grain for Exhibition Purposes; The Root Crop in Manitoba; Forage Crop Calendar; How to Kill Couch Grass; Growing Better Potatoes; Milk and Cream Tests; Producing the Best Cream; Farm Butter-Making; Cheese-Making on the Farm; The Cream Separator on the Farm; Hatching, Brooding, Rearing and Feeding Chicks; Poultry Houses for Manitoba; Turkey Raising in Manitoba; Sheep in Manitoba; Manitoba Rations for Animals and Poultry; Have You Dehorned your Market Cattle; Producing Onions in Manitoba; Asparagus Growing in Manitoba; Annual Flowers for Outdoor Sowing; Growing Sweet Corn; Growing and Using Tomatoes; Manitoba Fruit List; Growing Raspberries in Manitoba; Growing and Using Gooseberries; Growing Strawberries in Manitoba; Making and Caring for Lawns; Use of Bulbs for Winter Bloom; The Peony; The Gladiolus; Shrubs for Manitoba; Varieties of Vegetables for Manitoba Gardens; Vegetable Insects and their Control; Growing Better Rhubarb; The Beef Ring; Debates and Public Meetings; Help for the Home Dressmaker; Fitting and Alteration of Dress Patterns; First Lessons in Sewing; The Preparation of Whitewash; Canning, Pickling and Preserving; Facts about Manitoba.

Education.—Annual Report; Program of Studies, Elementary and Senior; Public School Act; Regulations; Beautification of School Grounds.

Municipal Commissioner.—Statistical information respecting the Municipalities of the Province, and list of names and addresses of Administrative and Health Officials of each Municipality; Manitoba Tax Commission.

Public Works.—Annual Report, included in Sessional Papers; Report of Insurance.

Attorney General.—Annual Report; Government Liquor Commission; Workmen's Compensation Board; Annual Report of Manitoba Telephone System.

Provincial Treasurer.—Public Accounts; Estimates; Budget Speech; Report of Manitoba Farm Loan Association.

Provincial Secretary.—Manitoba Gazette; Journals and Sessional Papers; Statutes of the Province.

Mines and Natural Resources.—Annual Report; Manitoba Mines and Minerals, 1928; A Guide for Prospectors; Tourist Guide; Fishing is Good in Manitoba; Mining Maps; Sectional Land Maps; Shelterbelts and the Farm Woodlot (1938).

Health and Public Welfare.—Annual Report; Manitoba Mother; Monthly Pre-natal and Post-natal Letters; Manitoba Baby; Manitoba Child; Child Study Material for Small Community Groups; Patterns for Infants' Layettes, *Price 10 cents*; Regulations *re* Boarding Homes for Children, Maternity Homes, and Day Nurseries; Quarantine Regulations; The Common Cold; Measles; Scarlet Fever; Diphtheria; Diphtheria Immunization; Whooping Cough; Trachoma; Typhoid Fever; Health Training Material for Teachers.

Publications issued by the Dominion Department of Pensions and National Health, The Canadian Council on Child Welfare, The Canadian National Institute for the Blind, also used in educational service.

SASKATCHEWAN.

Agriculture.—Annual Report of the Department of Agriculture; Annual Reports of Branches, etc.: Dairy, Live Stock, Field Crops, Statistics, Co-Operation and Markets, Bee Division, Report of Extension Department of College of Agriculture; Commission Reports; Live-Stock Marketing; Bulletins and leaflets on Live Stock, Field Crops, Dairying, Tillage Methods, etc.

Other Publications.—*Annual Reports.*—Bureau of Labour and Public Welfare; Department of Education; Department of Highways and Transportation; Department of Municipal Affairs; Department of Provincial Secretary; Department of Public Works; Department of Public Health; Department of Telephones; Department of Natural Resources; Local Government Board; Public Accounts; Cancer Commission; Mental Hospital; The Saskatchewan Gazette. *By Bureau of Publications.*—Weekly News Bulletin; Pamphlets relating to tourist attractions, highways, natural resources, industries, etc., of Saskatchewan.

ALBERTA.

Agriculture.—Annual Report; Calendar of the Schools of Agriculture; Destruction of Gophers; Alberta Weed Bulletin; Field Crops Hand Book; Turkey Production; Poultry Literature; Bee Culture; Planning and Beautifying the Home Grounds; Flowers Beautify Home Grounds; Sheep in Alberta; Drying Fruits and Vegetables; Laundry Bulletin.

Attorney General.—Annual Report on Dependent and Delinquent Children.

Education.—Annual Report; Program of Studies for the Elementary School; Promotion Tests for Grade VIII; Departmental Examinations for Grades IX-XII; Pamphlets on Picture Study, Architecture and Sculpture; Summer School Announcement; Normal School Announcement; Program of Studies for Technical High Schools (revised 1932, and under revision 1937); Regulations of the Department of Education governing the course of study in Grades VII, VIII and IX; High School Correspondence Courses; Suggested Time-table for One-Room Schools; Instructions Concerning the Teaching of French in the Elementary Schools; Supplement to the Program of Studies for the Elementary School—Selections for Reading; Suggestions for Seat Work in Junior Grades; Five-Figure Logarithmic Tables; Regulations of the Department of Education Relating to the Program of Studies and Annual Examinations for High Schools; Price List and Requisition Form—School-Book Branch; What Is and What Might Be in Rural Education in Alberta; Regulations of the Department of Education Relating to the Program of Studies and Annual Examinations for Commercial Schools (revised 1932, and under revision 1937); Bulletins and Regulations covering School Buildings in Rural and Village School Districts; Series of Plans and Specifications for Teachers' Residences; Series of Plans for One- and Two-Roomed Schools, with Specifications; Annual Announcement of the Provincial Institute of Technology and Art; Courses of Study for Technical High Schools; School Act; Physical Education for Rural Schools; Physical Education for Secondary Schools; Report of Legislative Committee on Rural Education; Rural Education in Alberta; High School Civics; Instructions *re* Conduct of Examinations; Special Instructions to Presiding Examiners; Special Instructions to Presiding Examiners *re* Commercial Examinations.

King's Printer.—Alberta Gazette, Price \$2 per year.

Lands and Mines.—Annual Report; Annual Report of the Chief Inspector of Mines; Alberta Oil and Gas Development, 1937; Handbook for information of public containing information on the following: the Survey System, Homestead Entries, Grazing on Provincial Lands, Hay Permits, Cultivation Permits, Irrigation, Leasing for Recreation Grounds or Exhibition Sites, Timber Licences and Permits, Timber Permit Berths, Fire-Killed Permit Berths, Damaged Timber Berths, Liability of Persons cutting Timber without Authority, Permit Dues, Telegraph and Telephone Poles, Mining Timber Dues, Persons Exempted from Timber Dues, Timber for Homesteads, Fur-Farming Leases, Issue of Permits to Mine Coal, Coal-Mining Leases, Petroleum and Natural Gas Regulations, Carbon-Black Permits, Placer Mining, Quartz Mining, Permits to remove Sand, Stone and Gravel from Beds, Rivers and Lakes, Dredging Leases, Disposal of Bar-Diggings, Alkali-Mining Regulations, Potash Regulations, Regulations for disposal of Bituminous Sand Deposits, Regulations for Leasing of Lands containing Limestone, Granite, Slate, Marble, Gypsum, Marl, Gravel, Sand, Clay, Volcanic Ash or any Building Stone, Forest Reserve Regulations, Fishing Regulations, Schedule of Fees.

Municipal Affairs.—Annual Report of Department; List of Alberta Municipalities.

Public Health.—Annual Report of Department; Annual Report on Vital Statistics. Bulletins issued by the Department on various health subjects. Pamphlets regarding infectious diseases—Diphtheria, Scarlet Fever, Measles, Whooping Cough, Smallpox, Influenza, Poliomyelitis; Alberta Mothers' Book; Mouth Health; What you should know about Cancer (book); General Information regarding Tonsils; Health Rules for School Children; Goitre; Systems of State Medicine (book); Final Report of Commission on State Health Insurance; Facts about Flies; In Times Like These (booklet on nutrition); History and Organization of Department and Boards of Health; Hospitals and Sanatoria; Protecting the Community's Food Supply; Protecting the Community's Milk Supply; Sanitary Disposal of Garbage and Wastes in the Community; Diseases Communicated by Intestinal Discharges; District Health Units; Combating Early Syphilis.

Public Works.—Annual Report.

Publicity.—Statistics of Progress, 1906-28; Alberta tourist literature.

Treasury.—Budget Speech containing extracts from Public Accounts and other financial statements; Public Accounts; Estimates of Revenue and Expenditure.

Other Publications.—Annual Reports are also issued by the following Departments and Branches: Railways and Telephones, Provincial Secretary (Insurance Branch), Board of Public Utilities, Labour Bureau.

BRITISH COLUMBIA.

Agriculture.—*Dairying.*—(5) Varying Butter-Fat Test; (71) Butter-Making on the Farm; (3) Cottage Cheese; (2) Farm Cheese; (1) Starters for Farm Cheese-making; (12) Rules Governing Cow-testing Associations in B.C.; (4) Clotted Cream; (17) The Story of Feed Unit; (20) First List of Dairy Sires; (22) Second List of Dairy Sires; (25) Third List of Dairy Sires; (27) Fourth List of Dairy Sires; (29) Fifth List of Dairy Sires; (32) Sixth List of Dairy Sires; (24) First Studies in Mendelism; (6) Care of Milk and Cream; (28) Certified Milk and Butter-Fat Records, 1934; (1) Ropy Milk in B.C.; (13) A Farm Dairy Sterilizer; (9) Dairy Farm Sterilizing Equipment. *Diseases and Pests.*—(45) Anthracnose; (39) Apple Aphides; (44) Apple-Scab; (34) Woolly Aphid of the Apple; (38) The Lesser Appleworm; (32) Cabbage-Root Maggot; (37) The Imported Cabbage-Worm; (2) Colorado Potato-Beetle in B.C.; (35) Currant Gall-Mite; (73) Diseases of Cultivated Plants; (66) Fire-Blight; (63) Locust-Control; (61) Making Lime-Sulphur at Home; (36) The Onion-Thrips; (41) The Oyster-Shell Scale; (31) Peach-Twig Borer; (72) Pests of Cultivated Plants; Field Crop and Garden Spray Calendar; Fruit Spray Calendar; (40) Soap Solutions for Spraying; (71) Dust Sprays; (33) Strawberry-Root Weevil. *Field Crops.*—(6) The Jerusalem Artichoke; (10) Cereal Smuts; (8) Field Corn; (12) Crop Rotation; (14) Farm Drainage; (3) Kale and Rape Crops; (15) Potato Diseases; (86) The Potato in B.C.; (7) Root-Seed Production; (98) Roots and Root-Growing; (11) Soil Fertility (13) Soiling and Annual Hay Crops; (5) Soils, Peat and Muck; (106) Weeds and their Control; (4) Noxious Weeds. *Fruits and Vegetable Growing.*—(57) Blackberry Culture; (69) Cantaloupe-Growing in B.C. Dry Belt; (70) Celery Culture; (56) Currant and Gooseberry Culture; (43) Gardening on a City Lot; (54) Loganberry Culture; (51) Orchard Cover Crops; (53) Selection of Orchard Sites and Soils; (62) Planting Plans and Distances; (60) Pruning Fruit-Trees; (55) Raspberry Culture; (67) Rhubarb Culture; (58) Strawberry Culture; (65) Tomato-Growing in B.C.; (42) Top-working of Fruit-Trees and Propagation; (64) Varieties of Fruit recommended for Planting in B.C. *Live Stock.*—(67) Care and Feeding of Dairy Cattle; (53) Feeding Farm Live Stock in B.C.; (64) Goat-Raising in B.C.; (60) Swine-Raising in B.C.; (99) Care and

Management of Sheep. *Poultry.*—(27) Breeding-Stock Hints; (32) Fattening Young Ducks; (15) Profitable Ducks; (25) Hints on Egg Hatching; (35) The Use of Feathers; (12) Management of Geese; (36) The Green Feed Deficiency in Fowls; (33) Management and Rearing of Guinea-Fowls; (39) Natural and Artificial Incubation and Brooding; (63) Poultry-House Construction; (11) Poultry-Keeping on a City Lot; (34) Care of Poultry Manure; (49) Market Poultry; (26) Practical Poultry-Raising; (19) Poultry Rations for Chicks and Layers; (80) Fur-Bearing and Market Rabbits; (28) Rabbit Recipes; (30) Sod-House Construction; (4) Management of Turkeys. *Miscellaneous.*—(92) Bee Culture in B.C.; (52) Better Farming Suggestions; (85) Clearing Bush Lands in B.C.; (50) Exhibition Standards of Perfection; Farm Account Book; (45) Judging Home Economics and Women's Work; List of Publications; (83) Preservation of Food; (66) Silos and Silage. *Reports.*—Agricultural Statistics; Climate of B.C.; Department of Agriculture Reports.

King's Printer.—British Columbia Gazette.

Lands.—*Forest Branch.*—*Circulars:* How to Obtain a Timber Sale; The Forest Resources of British Columbia; Grazing Regulations.

Mines.—Comprehensive annual reports, special bulletins, preliminary reports, etc.

Bureau of Provincial Information.—The Manual of British Columbia; British Columbia Invites You; Alluring British Columbia; Picturesque Highways of British Columbia; Rod and Rifle in British Columbia; British Columbia, Canada; Synopsis of Hunting and Fishing Regulations. *Lands Series of Bulletins.*—(1) How to Pre-empt; (2) Some Questions and Answers regarding British Columbia; (3) British Columbia—Northern and Central Interior; (5) British Columbia—Southern Interior; (6) British Columbia Coast, Lower Mainland; (7) British Columbia Coast, Toba Inlet to Queen Charlotte Strait; (8) British Columbia Coast, Queen Charlotte Strait to Milbanke Sound; (9) British Columbia Coast, Milbanke Sound to Portland Canal; (10) Crown Lands, Purchase and Lease; (11) Cariboo Land Recording Division; (12) Kamloops and Nicola Land Recording Division; (13) Similkameen Land Recording Division; (14) Vancouver Island; (15) Queen Charlotte Islands; (16) Cranbrook and Fernie Land Recording Divisions; (17) Yale Land Recording Division; (18) Osoyoos Land Recording Division; (20) Nelson and Shlocan Land Recording Division; (21) Revelstoke and Golden Land Recording Division; (22) Skeena Land Recording Division; (23) Stikine and Atlin Land Recording Division; (24) Hazelton Land Recording Division; (25) Peace River District; (26) Omineca District, Nation Lakes, etc.; (27) New Westminster Land Recording Division; (28) François-Ootsa Lakes; (29) Endako and Nechako Rivers; (30) Stuart and Babine Lakes; (31) Vicinity of the Pacific Great Eastern Railway (Squamish to Clinton); (32) Vicinity of the Pacific Great Eastern Railway (Clinton to 52nd Parallel); (33) Central Lillooet Division; (34) The Chilcotin Plateau; (35) Fort George Land Recording Division, Central and Western Portions; (36) South Fork of the Fraser and Canoe River Valleys; Mount Robson Park; Strathcona Park, Vancouver Island.

Section 5.—Reports of Dominion and Provincial Royal Commissions, Together with a Selection of Reports of British Royal Commissions having a Bearing on Canada.

DOMINION ROYAL COMMISSIONS.

NOTE.—Reports of important Royal Commissions back to 1884 have been included, but only those reports where a price is quoted are in print; these may be obtained from the King's Printer, Ottawa.

Royal Commission on the Arrangements *re* the Finances Advanced for the Construction of a Railway to the Pacific: Report (in Journals of the House of Commons, Appendix 1, 1873), 227 p. Report of the Canadian Pacific Railway Royal Commission, 1882, Ottawa, S. Stephenson and Co. 3 v., V. 1 and 2 Evidence, V. 3 Conclusions. Royal Commission on Immigration, 1884. Royal Commission on Railways: Report with appendices, 1888, 41 p. Royal Commission on the Relations of Capital and Labor in Canada: Evidence, Quebec, Ontario, Nova Scotia, New Brunswick, 1889, 4 v. Royal Commission in Reference to Certain Charges made against Hon. Sir P. A. Caron: Report, 1893, 602 p. Royal Commission on the Shipment and Transportation of Grain: Report, Sessional Papers, 81A, 1900. Royal Commission on Chinese and Japanese Immigration: Report, 1902. Royal Commission on Transportation: Report, 1903, 67 p. (Sup. to Report of Minister of Public Works). Royal Commission on Industrial Disputes in the Province of British Columbia: Report and minutes of evidence, 2 pts., 1903-04. Royal Commission on the Alleged Employment of Aliens in Connection with the Surveys of the Proposed Grand Trunk Pacific Railway, 1905. Royal Commission on the Grain Trade of Canada: Sessional Papers, 59, 1906. Royal Commission on a Dispute Respecting Hours of Employment Between the Bell Telephone Company of

Canada, Ltd., and Operators at Toronto, Ont., 1907, 102 p. Royal Commission on (Life) Insurance: Evidence, 4 v.: Report, 1907, 204 p. Royal Commission Quebec Bridge Inquiry: Report, 1908, 2 v. 206+ p.: List of plans accompanying the report, 1-37. Royal Commission to Inquire into Industrial Disputes in the Cotton Factories of Quebec: Report, 1909, 32 p. Royal Commission of Inquiry in the Matter of the Farmers Bank of Canada: Proceedings, 1913, 717 p. Royal Commission on Industrial Training and Technical Education: Commissioners Report, 1913, 4 v. (\$2). Royal Commission on Penitentiaries: Report, 1914, 44 p. (10 cents). Royal Commission re Parliament Buildings' Fire at Ottawa, Feb. 3, 1916 (10 cents). Royal Commission to Inquire into Railways and Transportation in Canada, 1917 (Drayton-Aeworth Comm.) (15 cents). Royal Commission re the O'Connor Report on Cold Storage in Canada, 1917 (Can. an. rev. 1917, p. 445-451). Royal Commission of Inquiry into the Civic Strike in Winnipeg: Chief Justice T. G. Mathers and F. G. Tipping, Commissioners, 1918 (Statement issued by Department of Labour, June 19). Royal Commission of Inquiry into the Ship-Yards Trouble in Vancouver: W. E. Burns, E. A. James, and James McVety, Commissioners, 1918 (Statement issued by Department of Labour, June 19). Royal Commission on Industrial Relations: Report together with a minority report, 1919, 26 p. (20 cents). Royal Commission on Racing Inquiry: Report of J. G. Rutherford, C.M.G., Commissioner, 1920 (10 cents). Royal Commission on Lake Grain Rates: Report of S. J. McLean, T. L. Tremblay, Levi Thompson, W. T. R. Preston, 1923 (10 cents). Royal Commission on Pensions and Re-Establishment, 1923: First interim report, 1923 (10 cents): Second interim report, 1924 (25 cents): Final report, 1924 (\$1). Royal Commission on Pulpwood: Report, Ottawa, July, 1924, 298 p. (\$1). Royal Grain Inquiry Commission: Interim report, 1924, 32 p. Royal Grain Inquiry Commission: Report, 1925, 217 p. (\$1). Royal Commission on Maritime Claims: Report, 1926, 45 p. (25 cents). Royal Commission Investigating the Fisheries of the Maritime Provinces and the Magdalen Islands, 1928, 125 p. (50 cents). Royal Commission on Customs and Excise: Interim reports 1-10, 119 p.: Final report, 1928, 24 p. (25 cents). Royal Commission on Reconveyance of Land to British Columbia pursuant to Order in Council of Mar. 8, 1927, 1928, 57 p. (25 cents). Royal Commission Appointed to Inquire into Pilotage in British Columbia Waters, 1929, 10 p. (10 cents). Royal Commission on the Transfer of the Natural Resources of Manitoba: Report of W. F. A. Turgeon, T. A. Crerar, C. M. Bowman, and Oliver Master, 1929, 46 p. (25 cents). Royal Commission on Technical and Professional Services: Report, February, 1930, 60 p. (Beatty Comm.) (15 cents). Royal Commission to Inquire into Trading in Grain Futures: Report, 1931, 90 p., chart (Stamp Comm.) (25 cents). Royal Commission to Inquire into Railways and Transportation in Canada, 1931-32, 115 p., maps, chart (Duff Comm.) (75 cents). Royal Commission on Banking and Currency in Canada, 1933, 119 p. (Macmillan Report) (50 cents). Royal Commission on Price Spreads: Report, 30+506 p., 1935 (Stevens Comm.) (\$2). Royal Commission on the Natural Resources of Alberta, 1935, 42 p. (A. K. Dysart, Chairman) (25 cents). Royal Commission on the Natural Resources of Saskatchewan, 1935, 68 p. (A. K. Dysart, Chairman) (25 cents). Royal Commission on Financial Arrangements Between the Dominion and the Maritime Provinces: Report, 24 p., 1935 (Sir Thomas White, Comm.) (10 cents). Royal Commission to Investigate Radio Broadcasting and Reception Conditions in Canada: Sir John Aird, Chairman, 1929 (25 cents). Royal Commission on Anthracite Coal: H. M. Tory, Commissioner, Feb. 3, 1937, 120 p. (25 cents). Royal Commission on the Textile Industry: W. F. A. Turgeon, Commissioner, 1938, 308p. (English and French editions), (75 cents). Royal Grain Inquiry Commission, W. F. A. Turgeon, Commissioner, 1938, 264 p. (\$1).

PROVINCIAL ROYAL COMMISSIONS.

Prince Edward Island.—Report of the Royal Commission on Education, 1930, 55 p. H. F. McPhee, Brief for the Province of Prince Edward Island for Readjustment of Financial Arrangements with the Dominion Government and Full Implementation of the Report of the Royal Commission on Maritime Claims, August, 1934, 30 p. The Case of Prince Edward Island: Submission Presented to the Royal Commission on Dominion-Provincial Relations by the Government of Prince Edward Island, Charlottetown, Irwin Pr. Co., 1938, 4+66 p.

Nova Scotia.—Report of Commission appointed under Chapter 10, Acts 1907, Entitled "An Act Respecting Old Age Pensions and Miners' Relief Societies", 1908. Royal Commission re Expenditures in Connection with the Construction of Certain Federal Aid Roads by the Provincial Highway Board: Report, 1921, 20 p. Report of the Royal Commission Respecting the Coal Mines of the Province, 1925, 59 p., chart. Report of Provincial Royal Commission on Coal Mining Industry in Nova Scotia, 1926, 31 p. Province of Nova Scotia: a Submission of Its Claims with Respect to Maritime Disabilities Within Confederation as Presented to the Royal Commission, Halifax, N.S., July 21, 1926, 178 + 4 p. Royal Commission on Ratings of the Lunenburg Fishing Fleet and Lumber Industries as Applied by the Workmen's Compensation Board, Nova Scotia: Report and findings, 42 p., 1927. Royal Commission on the Mentally Deficient Persons in Nova Scotia, 1927: Report, 4 p., 1928. Report of the Royal Commission Investigating the Apple Industry of the Province of Nova Scotia, 1930, 71 p. Report of the Royal Commission Respecting the Coal Mines of Nova Scotia, 1932, 32 p., charts. Report of the Royal Commission Concerning Jails, 1933, 115 p. Royal Commission of Economic Inquiry: a Submission on Dominion-Provincial

Relations and the Fiscal Disabilities of Nova Scotia Within the Canadian Federation, 1934, 263 p.: Report, 238 p., bibl., appendices, 133 p. Report of the Royal Commission on Transportation, 1936, 21 p. Submission on Behalf of the Union of Nova Scotia Municipalities, to the Royal Commission on Dominion-Provincial Relations. February, 1938, 37 p. Submission by the Government of the Province of Nova Scotia to the Royal Commission on Dominion-Provincial Relations, 1938, 141 p., appendices, 22 p.

New Brunswick.—Royal Commission Concerning St. John and Quebec Railway Company Charges: Report (N.B. pa. sup. appx., p. 116-147, 1915). Report of the Royal Commission in Respect to the Lumber Industry, 1927, 15 p. Report of the Royal Commission to Investigate Working of Compensation Act in Respect to Lumber Industry, 1927, 10 p. The W. H. Harrison, Special Brief for New Brunswick, for Readjustments of Financial Arrangements with Dominion Government, and Further Implementation of the Recommendations of the Royal Commission on Maritime Claims, 1934, 27 p.

Quebec.—Royal Commission (appointed to hold an investigation into the administrative details of the constitution, working and sale of the Quebec, Montreal, Ottawa and Occidental Railway, as well as the final settlement of accounts and other facts relating to the railway), Hon. A. B. Routhier, Chairman, 1885 (Dom. an. reg., 1885, p. 182). Royal Commission on Lunatic Asylums of the Province of Quebec: Report, 1888, 182 p.

Ontario.—Royal Commission on Certain Charges Against the Warden of the Central Prison: Report and Evidence of Wardens of Prisons in the United States and Canada, 1883, 181+63 p. Report of the Royal Commission on the Mineral Resources of Ontario and Measures for their Development, 1890. Report of the Royal Commission on Forest Reservation and National Park, and Papers and Reports upon Forestry, Forest Schools . . . 1893. Return of Royal Commissions since Confederation, together with the dates, subjects, etc., 1894, 7 p. Royal Commission on the Financial Position of the Province of Ontario: Report, 1901, 29p. Report of the Royal Commission on the Gamey Charges, Toronto, 1903, 952 +98+48 p. Royal Commission on Railway Taxation: H. J. Pettypiece, Chairman, Archibald Blue and Professor Adam Shortt, Commissioners: Report, 1905 (Can. an. rev., 1905, p. 291-3; 1906, p. 343). Royal Commission on the University of Toronto: Report, 1906, 60+268 p. In the Matter of a Royal Commission to Inquire into the Administration, Management and Welfare of the Ontario School for the Blind: Report and recommendations by Norman Blain Gash, 1917, 35 p. Royal Ontario Nickel Commission: Report and appendix, 1917. Royal Commission on University Finances: Report, 1921, 160 p. Royal Commission on Automobile Insurance Premium Rates: Interim Report on Compulsory Insurance and Safety Responsibility Laws, 1930, 85 p. Royal Commission on Public Welfare: Report, 1930, 111 p. Royal Commission to Investigate the Advisability of Amending the Workmen's Compensation Act: Hon. W. E. Middleton, Commissioner (Can. an. rev., 1930-31 p. 143—No mention of report being issued; only of Judge's ruling). Royal Commission Appointed to Inquire into Certain Matters Concerning the Hydro-Electric Power Commission of Ontario: Report, 1932, 11 p. Royal Commission on the Use of Radium and X-rays in the Treatment of the Sick, 1932, 171 p. Royal Commission of Inquiry into "the circumstances surrounding the arrest and sentencing to five years in the Kingston Penitentiary of Albert Dorland in April, 1930, for carrying offensive weapons in the course of an alleged attempt to hold up the Royal Bank of Canada Branch at Church and Wellesley Streets, Toronto", Aug. 2, 1933: Hon. A. C. Kingstone, Commissioner. Royal Commission of Inquiry into Alleged Cruelty and Unsatisfactory Management at the Children's Shelter at Windsor, Ontario: M. A. Sorsoleil, Commissioner, 1933-34, (Can. an. rev., 1934, p. 173-4). Royal Commission to Inquire into the Conduct, Management and Administration of the Children's Aid Society of York County: Judge James Parker, Commissioner: Report presented 1934 (Can. an. rev., 1934, p. 173-4). Royal Commission to Inquire into the Purchase by the Henry Government in March, 1933, of the subsidiary company of the Abitibi Power and Paper Company and the Ownership at the time of some of the Company's Bonds both by the Hon. George S. Henry and the Rt. Hon. Arthur Meighen. . . July 12, 1934, (Can. an. rev., 1934, p. 188). Royal Commission to Investigate Charges Against Certain Members of the Toronto Police Force, 1935-36.

Manitoba.—Royal Commission on the Financial Affairs of the Province: Report (Man. pa. 21, p. 389-538, 1900). Royal Commission upon the University of Manitoba: Report (Man. pa. p. 397-492, 1910). Royal Commission on Technical Education and Industrial Training: Report (Man. pa. p. 281-356, 1912). Royal Commission Appointed to Investigate the Charges Made in the Statement of C. P. Fullerton, K.C.: Report, 1916, 17 p. Royal Commission on the New Parliament Buildings: Report, 1916, 85 p. Royal Commission on all Expenditure for Road Work during the Year 1914: Report, 1917, 60 p. Royal Commission on all matters Pertaining to the Manitoba Agricultural College: Interim report (Man. pa. No. 17, p. 1161-1205, 1917). Royal Commission on Education: Reports on the College of Agriculture and the University of Manitoba Submitted by the Royal Commission and the Carnegie Foundation for the Advancement of Teaching, 1924. Royal Commission Appointed to Inquire into the Administration of the Child Welfare Division of the Department of Health and Public Welfare, 1929, 54 p., chart. Royal Commission *re* Allegations as to the Seven Sisters Falls Power Site Agreement: Chief Justice D. A. Macdonald,

Mr. Justice A. K. Dysart, Mr. Justice J. F. Kilgour, 1929 (Pub. in Man. Free Press, May 1 and 7, 1929). Royal Commission Regarding the Blind in Manitoba and Saskatchewan: Dr. Olin H. Burritt, Commissioner, (Tabled in the Legislature Mar. 6, 1931), 45 p. Royal Commission on Manitoba Pool Elevators: E. K. Williams, Commissioner, Report, June 19, 1931 (Can. an. rev., 1930-31, p. 235-6). Royal Commission Appointed to Inquire into the [misappropriation] of funds belonging to the University of Manitoba and to Heber Archibald..., 1932. Manitoba's Case: A submission presented to the Royal Commission on Dominion-Provincial relations by the Government of the Province of Manitoba, 1937: 9 parts—(1) Introduction, 6 p.; (2) The constitutional relations of the Dominion and the provinces, 43 p.; (3) The effects of federal monetary policy on western Canadian economy, 47 p.; (4) The effects of federal tariff policy on Western Canadian economy, 40 p.; (5) The effects of declining income, 32 p.; (6) The financial problems of municipalities and school districts, 26 p.; (7) Analysis of Manitoba's treasury problem, 96 p.; (8) Manitoba's case: summary and recommendations, 58 p.; (9) An examination of certain proposals for the readjustment of Dominion-Provincial financial relations, 29 p.

Saskatchewan.—Bribery and Liquor Commission: Hon. J. T. Brown and Hon. E. L. Elwood, 1916 (Can. an. rev., 1916, p. 705) (not printed). Highway Frauds Commission: Hon. E. L. Wetmore, W. E. Mason, and H. G. Smith, 1916. Buildings and Telephone Commission: Sir F. W. G. Haultain, Chief Justice, Hon. H. W. Newlands, and Hon. J. H. Lamont, 1916-17. Royal Grain Inquiry Commission: Reports, 1928, 157 p. Saskatchewan Royal Commission on Immigration and Settlement: Report, 1930, 206 p. Royal Commission appointed to investigate into mining conditions in the Province of Saskatchewan, 1932: His Honour E. R. Wylie, Commissioner. Royal Milk Inquiry Commission: Report, 1933, 42 p. mimeo. Submission by the Government of Saskatchewan to the Royal Commission on Dominion-Provincial Relations, 1937, 4+434 p.

Alberta.—Royal Commission to Inquire into Alleged Undue Interference with Justice in the Case of Henry Wise Wood, Jr. and O. B. Lassiter (Can. an. rev., 1934, p. 306).

British Columbia.—Royal Commission for Instituting Inquiries into the Acquisition of Texada Island: Papers (B.C., pa. p. 181-246, 1875). Kootenay Royal Commission: Proceedings (B.C. pa. p. 141-156, 1879), 1880. Royal Commission on the Conduct of the Affairs of the Municipal Council of Victoria: Report (B.C. pa. p. 481-512, i-cxli, 1892). Royal Commission on the Management of the Provincial Lunatic Asylum at New Westminster: Report (B.C. pa. p. 503-574, 1894). Royal Commission of Inquiry on Timber and Forestry: Final report, 1909-10. Royal Commission on Municipal Government, 1912: Report, 18 p., 1913. Royal Commission on Taxation: Synopsis of report and full report, 1912, 38 p. Royal Commission on Agriculture: W. H. Hayward, Chairman, 1912, Full report, 9+398 p., 1914. Royal Commission on Matters Relating to the Sect of Doukhobors in the Province: Report of William Blakemore, 1913, 66 p. Royal Commission on Milk Supply: Report, 1913, 29 p. Royal Commission on Agriculture: Report, 1914, 9+42 p.: Full report, 1914, 9+398 p. Royal Commission on Labour: Report, 1914, 28 p. Royal Commission on Mental Hygiene: Report and final report, 2 pts., 1927-28. Royal Commission on State Health Insurance and Maternity Benefits: C. F. Davie, Chairman: Progress report, Feb. 11, 1930, 30 p.: Final report, 1932, 63 p. Royal Commission on Chiropractic and Drugless Healing: Denis Murphy, Commissioner, 11 p., 1932. Municipal Taxation Commission: A. M. Harper, Chairman, 4+90 p., mimeo, 1933. British Columbia in the Canadian Confederation: Brief presented to the Royal Commission on Dominion-Provincial Relations by the Government of the Province of British Columbia, 37 p., 1938: Submission Presented to the Royal Commission on Dominion-Provincial Relations by the Government of the Province of British Columbia, 376 p., 1938.

BRITISH ROYAL COMMISSIONS.

Royal Commission on the Natural Resources, Trade and Legislation of Certain Portions of H. M. Dominions, 1912: Reports and minutes of Evidence, 1st Interim Report, 1912, 3 p.; 5th interim report (Canada), 1917, 6+61 p.; Final report, 1917, 9+199 p.—Minutes of evidence, pt. 1: Migration, 1918, 293 p., pt. 2: Natural Resources, Trade, 1912, 3+432 p.: Minutes of evidence taken in Maritime Canada in 1914, 1915, 5+191 p.: Minutes of evidence taken in Central and Western Canada in 1916; pt. 1, 1917, 12+464 p.; pt. 2, 1917, 7+462 p.

CHAPTER XXX.—THE ANNUAL REGISTER. 1937-38.

Section 1.—Dominion Legislation, 1937.

Legislation of the Second Session, Eighteenth Parliament, Jan. 14, 1937, to Apr. 10, 1937.

Finance and Taxation.—Three Appropriation Acts were passed during the session, *viz.*, cc. 1, 2 and 45, c. 2 applying to the fiscal year ended Mar. 31, 1937, and cc. 1 and 45 to the fiscal year ended Mar. 31, 1938. C. 1, the Appropriation Act, No. 1, 1937, granted a sum not exceeding \$37,395,179·14 towards defraying the several charges and expenses of the public service, being one-sixth of the amount of each of the several items to be voted set forth in the Main Estimates, together with a sum not exceeding \$16,010,551·17 towards defraying the several charges and expenses of the public service, being one-sixth of the amount of each of the several items to be voted set forth in the Special Supplementary Estimates. C. 2, the Appropriation Act, No. 2, 1937, granted a sum not exceeding \$40,903,880·76 towards defraying the several charges and expenses of the public service set forth in the Schedule to the Act and based on Further Supplementary Estimates 1936-37. By c. 45, the Appropriation Act, No. 3, 1937, were granted: \$186,975,895·69 towards defraying the several charges and expenses of the public service, being five-sixths of the amount of each of the items set forth in Schedule A to this Act; \$80,052,755·83, being five-sixths of the amount set forth in Schedule B to this Act; \$11,339,955·98, being the amount set forth in Schedule C. Under s. 5 of this chapter, the Governor in Council was empowered to raise a loan not in excess of \$200,000,000 for public works and general purposes, principal and interest being chargeable to the Consolidated Revenue Fund.

C. 33 is the Gold Clauses Act, 1937. It enables contractual obligations payable in money of Canada, which give the creditor a right to require payment in gold or gold coin, to be discharged by currency of Canada, dollar for dollar of the face value of the obligation. Such currency shall be legal tender for a debt payable in gold. Where a gold clause obligation governed by Canadian law is payable in money other than money of Canada, tender of the face value in currency which is legal tender for the payment of debts in the country of such money shall entitle the debtor to a discharge of the obligation. Gold clause obligations are declared to be contrary to public policy and are not to be contained in any obligation made from the date of this Act.

National Revenue.—C. 19 is an Act to revive the Business Profits War Tax Act, 1916, certain provisions of which, relating to the procedure for appeals from assessments made thereunder, have been amended by repealing the provisions regarding procedure in appeals from assessments and substituting therefor Part VIII of the Income War Tax Act (c. 97, R.S.C. 1927) except s. 58.

Under c. 24, the Customs Act (c. 42, R.S.C. 1927), as subsequently amended, is further amended in several respects. Under s. 1, the scope of the Act is widened to include import and other duties and taxes along with excise duties and taxes as those which may be disregarded in estimating "value for duty" in certain cases. Ss. 2 and 3 amend the legislation with regard to the fixing of values for duty. With regard to the importation of fire arms and munitions of war, s. 122 of the Act is

repealed and new provisions are made under s. 10 of the Statutes for regulating this traffic. S. 8 revises the conditions under which drawbacks may be allowed.

C. 25 amends the Customs Tariff (c. 44, R.S.C. 1927, with later amendments) by the addition of subsections governing the rate of exchange on appreciated currency in computing value for duty of imported goods, and the application of special or dumping duties when such a rate of exchange has been fixed.

The Customs Tariff is also amended by c. 26, which states that the Governor in Council may, in certain cases, order that certain duties and taxes shall be disregarded in estimating market value of goods imported. By ss. 2 and 3 of this chapter, Schedules A and B of the said Act are amended by striking out certain items and substituting Schedules A and B of this legislation.

C. 27 amends the Department of National Revenue Act (c. 137, R.S.C. 1927), by repealing the subsection providing gratuity in lieu of leave on retirement.

A number of amendments are made to the Excise Act, 1934 (c. 52, 1934) by c. 29. The definition of 'officer' is extended to include every person employed for the purpose of the administration or enforcement of this Act, including any member of the R.C.M.P. To s. 43 of the Act, which deals with the ascertaining and paying of duties, is added a subsection dealing with duties imposed on goods bonded in warehouse which have been found to be deficient in quantity, to the effect that certain spirits, under such circumstances, may be subject to an abatement. The subsections providing that priority be given to court proceedings under the Excise Act and that penalties under the Act may be levied by sale of the goods and chattels of the offender are removed from s. 118. A number of other amendments are made to the legislation dealing with distilleries, mainly with respect to penalties for distilling without licences, changes in licence fees or duties, and permits to remove spirits for export. S. 16 amends Part VII of the original Act by specifically defining 'wood alcohol'. The section, also under this Part, relating to the penalties for violation of the provisions of this Act is repealed and a new section substituted as s. 319A.

C. 41 amends the Special War Revenue Act (c. 179, R.S.C. 1927). Under this amendment the term 'partly manufactured goods' is limited to goods which are to be incorporated into and form a constituent or component part of an article. The tax on dressed or dyed furs is raised from 6 to 8 p.c. Schedule III of the Act is amended mainly by the broadening of the definition of 'fire brick' and the addition of photographs, paintings, drawings, etc.; raw and salted hides; and materials used as ingredients in canned fish. Spinal braces and articles for the use of the blind are added to "Goods Enumerated in Customs Tariff Items".

Agriculture.—By c. 8, which amends the Dairy Industry Act, Cheddar cheese is exempted from the regulations relating to the weight of packaged cheese. Other amendments under this legislation are of a minor nature.

According to the amendment to the Prairie Farm Rehabilitation Act (c. 23, 1935), enacted by c. 14, the Governor in Council may establish one or more Advisory Committees to take over the duties, with the addition of the development and promotion of land utilization and land settlement, of the former Prairie Farm Rehabilitation Advisory Committee. The stipulations regarding the membership of that Committee do not apply to the new Committees, but the chairman of each is to be appointed by the Minister. The Act authorizes the necessary expenditure for the fiscal years 1938-39 to 1939-40.

C. 30, cited as the Feeding Stuffs Act, 1937, lays down regulations demanding the registration of certain feeding stuffs (given in Schedule A) offered for sale. Registration may be refused by the Minister in cases where the feeding stuff does not conform with stated analysis specifications and if registration is approved no change may be made in composition or ingredients without the consent of the Minister. Feeding stuffs (Schedule A) and by-products (Schedule B) must be labelled in the different ways prescribed. Provision is made for the appointment of the necessary inspectors and analysts, and offences and penalties under the Act are laid down. The Feeding Stuffs Act (c. 67, R.S.C. 1927) is repealed.

A Dominion guarantee of principal and interest of loans made by any chartered bank and guaranteed by the provinces of Manitoba, Saskatchewan, and Alberta, for the purpose of purchasing seed grain and providing other assistance to farmers in connection with seeding operations during the spring of 1937, is provided for by c. 39, the Seed Grain Loans Guarantee Act, 1937. The aggregate principal amount of such loans in Alberta shall not exceed \$1,600,000, in Manitoba \$750,000, and in Saskatchewan \$6,600,000. Guarantees given under this legislation must conform to certain stated terms and meet with the approval of the Governor in Council.

C. 40 is the Seeds Act, 1937, and sets forth regulations regarding the sale of cereal, forage crop, grass, field root, garden or vegetable and other seed under separate categories, the use of established variety names and licences for new names (the Minister of Agriculture has power to refuse or cancel a licence, or change a name). The advertising of seed for sale, the sale of seed for export, the importation of seed, the taking of official samples, etc. is also provided for. Penalties for violation of the provisions of this Act are laid down. This legislation repeals the Seeds Act (c. 185, R.S.C. 1927) as amended in 1928 (c. 47).

Fisheries.—The Fisheries Research Board of Canada is created under c. 31. The constitution of the Board is defined. Members serve without salary but expenses and, in certain cases, emoluments are provided for. The Board is given charge of all Dominion fishery research stations and control of investigations in connection with marine and freshwater fisheries, etc., which work was formerly carried on by the Biological Board. Other work may be assigned to the Board by the Minister of Fisheries. The Biological Board Act (c. 18, R.S.C. 1927) is repealed.

C. 36 is cited as the Northern Pacific Halibut Fishery (Convention) Act, 1937. In the Schedule to this Act is set forth the Convention between Canada and the United States of America for the Preservation of the Halibut Fishery of the Northern Pacific Ocean and Bering Sea, signed at Ottawa, Jan. 29, 1937. The Act confirms the Convention and suspends any other inconsistent laws. Powers for carrying out the Convention are vested in the Governor in Council and the apportionment of expenses of the International Fisheries Commission is laid down. A close season is defined for halibut fishing in territorial waters and control measures are set forth. Violations of this Act and penalties therefor are laid down.

Immigration.—By c. 34 a number of minor amendments are made to the Immigration Act (c. 93, R.S.C. 1927). A proviso is added to the section on domicile to the effect that persons absent from the Dominion on business as employees of Canadian organizations or of His Majesty's Government in Canada shall not lose their Canadian domicile on such account. Persons in transit through Canada from and to outside points are included in "non-immigrant classes" and persons suffering from trachoma are included in "prohibited classes" of immigrants. Forms C, F, and G in the Schedule are repealed and new forms substituted. A number of minor

amendments are made as a consequence of the administration of the Immigration Act having been transferred to the Department of Mines and Resources.

Insurance.—The section of the Canadian and British Insurance Companies Act, 1932, which deals with the registration of provincial companies, is amended by c. 5. It is now provided that the deposit required to be made by certain provincial companies may be less, within limits, than the amount otherwise required under this Act.

Justice.—By c. 4 (the British Columbia Divorce Appeals Act), the Court of Appeal of British Columbia shall have jurisdiction to hear and determine appeals from an order, judgment or decree of a court of the province or a judge thereof having jurisdiction in divorce and matrimonial causes.

The Supreme Court Act (c. 35, R.S.C. 1927) is amended by c. 42. To s. 37 dealing with appeals direct to the Supreme Court from courts other than courts of last resort in a province by leave of such courts, by consent of both parties, and where over \$2,000 is involved, the proviso is added that no such leave shall be granted by such court of final resort unless the appeal lies to that court and to the Supreme Court from the judgment pronounced in that appeal.

Labour.—The Home Improvement Loans Guarantee Act, 1937 (c. 11 of the Statutes), is an Act to increase employment by encouraging the repair of rural and urban homes. The Government of Canada may guarantee approved lending institutions against losses, which may result from home improvement loans, to the extent of 15 p.c. of the amount of such loans. The amount of loans which may be guaranteed under this Act shall not exceed \$50,000,000 and the total liability of the Government is therefore \$7,500,000. The amount of individual loans shall not exceed \$2,000 except in the case of a multiple family dwelling or a property to be so converted, when it shall not exceed \$1,000 for each family plus \$1,000. Such loans must comply with conditions laid down in the Act and are subject to regulations prescribed by the Governor in Council.

Under c. 23, which is an act to amend the Combines Investigation Act (c. 26, R.S.C. 1927), the definitions of "Commissioner" and "Minister" are amended and the definition of "Special Commissioner" is added. Ss. 5-9 of the Act, which were repealed by c. 54 of the Statutes of 1935, are now replaced by new sections which cover the subjects of administration of the legislation and remuneration of officers in amended form. The Governor in Council may appoint a Commissioner and an Assistant Commissioner, and may also appoint from time to time one or more Special Commissioners whose duty it shall be to conduct an investigation into any alleged combine. The Commissioner may employ such temporary, technical and special assistants as are necessary. Whereas formerly, after a preliminary inquiry, the decision of the Commissioner as to whether further inquiry should be made was final, a report must now be made to the Minister who may instruct further investigation. At the conclusion of an investigation, the Special Commissioner shall make a report to the Commissioner which shall be transmitted to the Minister and within fifteen days be made public unless otherwise decided by the Minister. The authority of the Commission to investigate agreements according to the provisions of the Dominion Trade and Industry Commission Act, 1935, and to report to the Minister of Justice the misuse of a patent with a view to having the patent revoked, is repealed. The Act is extended to provide that orders of the Commissioner or Special Commissioner compelling the attendance of any witness or the production of any book, record, paper, or article, or the examination of any person on oath, or for

certain other purposes, can be enforced only on the certificate of the President of the Exchequer Court or Chief Commissioner of the Dominion Trade and Industry Commission that it is fit and proper that the action mentioned in the application should be taken. It is further provided that where an investigation under the Act is proceeding in any province, and the Commissioner or Special Commissioner is desirous of exercising the power to commit to prison or otherwise penalize any person, application for authority to do so may be made to a judge of the Supreme or Superior Court of the province in which the investigation is being made.

For the purpose of expanding employment in primary and secondary production and at the same time conserving and developing natural resources, accelerating the expansion of trade, industry, and gainful occupation, and thereby lessening the governmental burdens consequent upon unemployment and agricultural distress, the Unemployment and Agricultural Assistance Act, 1937, (c. 44) was enacted. The Act authorizes the execution of such works and undertakings as may be determined, and the employment thereon of competent persons who are in receipt of relief. All contracts for such works carried out under provincial jurisdiction but to which the Dominion Government is contributing shall be approved by the Minister of Labour and supervised by the Dominion Government. The Government may enter into agreements with any of the provinces respecting alleviation of unemployment conditions and of agricultural distress and may, where necessary, grant financial assistance by way of a loan to assist the province to pay its share of expenditures for such purposes. Such agreements may be entered into with corporations or individuals respecting expansion of industrial employment, but no financial assistance shall be granted to any province unless certified statements as the Dominion Government may require are furnished. The Dominion Government may also examine and audit provincial records related to such works if deemed necessary.

Parliamentary Representation.—C. 9 amends the Dominion Franchise Act to permit of the annual revision of the lists of electors being omitted for the year 1937.

Pensions.—By c. 12, the payments of pensions and compassionate allowances to officers' wives, under the Militia Pension Act, are to be made in equal monthly instalments in arrear, instead of yearly in advance, and, unless otherwise specified, shall continue during the lifetime of the recipient.

C. 13 amends the Old Age Pensions Act (c. 156, R.S.C. 1927). It provides for the payment of a pension to every blind person, 40 years of age or over, who does not receive a pension in respect of blindness under other legislation, and whose income is less than the specified amount for each of the classes enumerated in s. 8A, s-s. 1. The maximum pension is \$240 yearly, but in the case of a blind person who, after the coming into force of this legislation, marries a blind person unable to perform work for which sight is essential the maximum pension is \$120. Maximum pensions are subject to reductions as laid down. Pensions for blind persons are to be made on the same basis as old age pensions, *i.e.*, the Dominion Government will contribute 75 p.c. of the cost if and when the individual provinces undertake to contribute the remainder.

The Throne.—By c. 16, the alteration in the law touching the Succession to the Throne, as set forth in the Act of Parliament of the United Kingdom entitled "His Majesty's Declaration of Abdication Act, 1936", is assented to in line with the Statute of Westminster, 1931. The Instrument of Abdication is set out in Schedule 1 to the Act and the request and consent of Canada to the enactment of the said Act in Schedule 2.

Trade and Commerce.—C. 15 amends the Precious Metals Marking Act (c. 84, R.S.C. 1927) so far as the latter legislation applies to gold- and silver-plated articles. To the original list of such articles which must have applied to them the authorized trade mark are added “gold plate” and “gold plated”, “silver plate” and “silver plated”. The penalties outlined in s. 14 of the original legislation are also amplified with regard to the importation of advertising matter wrongly describing such articles.

The Trade Agreement between Canada and the United Kingdom is approved by c. 17. Inconsistent laws are suspended and the United Kingdom Trade Agreement Act, 1932, (c. 2, 1932-33) is repealed. The new Agreement is set out in the seven Schedules to the Act.

C. 18 is a minor amendment to the Weights and Measures Act regarding recovery of penalties.

A Trade Agreement between Canada and Germany, as set out in the Schedule to the Act, is approved by c. 20 of the Statutes.

C. 21 approves a Trade Agreement between Canada and Uruguay, as set out in the Schedule to the Act.

Transportation.—*Railway.*—By c. 3, independent auditors for the year 1937 are appointed to make a continuous audit of the accounts of the National Railways notwithstanding the provisions of s. 13 of the Canadian National-Canadian Pacific Act, 1933.

C. 6 is an Act to authorize the provision of moneys to meet certain expenditures made and indebtedness incurred by the Canadian National Railways during the calendar year 1937 and to authorize the guarantee by the Dominion Government of certain securities to be issued by the Canadian National Railways. The Company is given power to issue securities for retiring maturing obligations and payment of sinking funds to the extent of \$7,114,000 and for capital improvements to the extent of \$23,607,700. The form and terms of the guarantee are laid down.

The cancellation of capital stocks and certain indebtedness of the Canadian National Railway System to the Dominion Government and the adjustment of the accounts of the System is provided for by c. 22, the Canadian National Railway Capital Revision Act, 1937. Certain Government claims against the Canadian National Railways are abandoned, and capital stock surrendered. Provision is also made for the adjustment of differences between the Public Accounts and the National Railway System accounts; surpluses and deficits, notwithstanding s. 15 of the Canadian National Railways Act, are now to be included in the surpluses and deficits of the National Railways but the directors of the C.N.R. may cause surplus earnings to be paid over to the Consolidated Revenue Fund. The ‘proprietor’s equity’ must now be shown in the accounts of the National Railway System and included in the net debt of Canada as well as disclosed in the Public Accounts under “Government assistance to railways”. A ‘Securities Trust’ is established to which is transferred indebtedness amounting to \$1,218,642,195.67 as set out in Schedules A1 and A2 which it is to hold as authorized by this Act.

Other.—Minor amendments are made to the Government Harbours and Piers Act by c. 10, mainly respecting changes made necessary by the organization of the Department of Transport and the National Harbours Board.

C. 28 provides for the opening of a Department of Transport Stores Account to which shall be charged the value, at cost, of all stores acquired prior to Apr. 1, 1927, and transferred to the Department of Transport, together with all subsequently

acquired stores. The Minister of Finance is authorized to make such advances from the Consolidated Revenue Fund as may be necessary to enable the Minister of Transport to acquire or replenish such materials and equipment as is authorized by statute, but the outstanding balance of such advances shall at no time exceed one million dollars, and the appropriations of the Department for the particular items covered are to be applied against such advances.

The Trans-Canada Air Lines are incorporated under c. 43. The Corporation, under the management of a Board of Directors composed of seven persons, to be elected and appointed as provided, is authorized to establish, operate, and maintain air lines for the purpose of transporting mails, passengers, and goods by air and to enter into contracts for such transportation across Canada and between and within the several provinces. The authorized capital of the Corporation is \$5,000,000 (50,000 shares of \$100 par value). Shares were offered to the Canadian National Railway Company at par and the Company was permitted to sell or dispose of not more than 24,900 shares (except by the approval of Parliament) to persons engaged or interested in aviation and approved by the Minister of Transport. The Minister is empowered to contract with the Corporation for the operation and maintenance of the Trans-Canada Lines and the Postmaster General may enter into a contract with the Corporation for the transport of mails by the Trans-Canada Lines.

Miscellaneous.—Amendments are made regarding the organization of the Central Council and the Executive Committee of the Red Cross Society by c. 7.

C. 32 is the Foreign Enlistment Act, 1937. It is an offence against this Act to enlist, or induce another to enlist, in the armed forces of a foreign State at war with a friendly foreign State (except that nationals of countries which are represented in Canada by foreign consular or diplomatic officers may be recruited by the latter under regulations made by the Governor in Council), to take on board a conveyance any person so enlisted, to build, commission, equip, or dispatch ships to be employed by armed forces of any foreign State against a friendly State, to prepare any military, naval, or air expedition to proceed against dominions of any friendly State, or to bring within Canada, in violation of Canadian neutrality, any prize of war. Offences against this Act may be prosecuted as indictable offences in which case fines up to \$2,000 or two years imprisonment or both fine and imprisonment may be imposed. Regulations that the Governor in Council may make under this Act are to be published in the *Canada Gazette*. The Foreign Enlistment Act, 1870, passed by the Parliament of the United Kingdom (c. 90, 33-34 Victoria) is repealed in so far as it is part of the law of Canada.

C. 35, the National Parks Act, 1937, provides for the setting aside, as a National Park, of such lands in New Brunswick as the province and Canada agree upon, subject to the National Parks Act (c. 33, 1930). The Nova Scotia and Prince Edward Island National Parks Act (c. 43, 1936) is amended by s. 3 of this legislation to provide for the withdrawal from the park in Nova Scotia of certain lands in Cape Breton island.

By c. 37, the Agreement of Mar. 30, 1920, with the city of Ottawa is extended for another year as from July 1, 1936.

C. 38 amends the Royal Canadian Mounted Police Act (c. 160, R.S.C. 1927) with respect to the appointment of the R.C.M.P. Reserve, which formerly contained only officers and men who had served in the Force and who were appointed to the Reserve for a term not exceeding one year. The Commissioner may now appoint, for a period of three years, such number of men, as reserve constables, as the Gover-

nor in Council thinks proper. Regulations relating to the conditions of appointment, rank and promotion, resignation, pension, and training, etc., of members of this Reserve are stated. It is provided that time served in the permanent forces of Canada may be included in the term of service of officers and constables of the R.C.M.P. for purposes of pension.

Section 2.—Provincial Legislation.

The reader is referred to the different provincial authorities for information in this connection. It is felt that whatever is lost to those readers who are interested in having all provincial legislation brought together and listed under one head is more than offset by the information of more general interest which it has been possible to include in the limited space available, but which would otherwise have had to be omitted.

Section 3.—Principal Events of the Year.

Subsection 1.—The Economic and Financial Year, 1937.*

While constructive factors dominated the economic situation during the first eleven months of 1937, a drop of 6.5 points in the index of the physical volume of business gave evidence of the industrial recession which began in December. In comparison with the year 1936, however, there was an increase of 9.4 p.c. in the 1937 index; major economic factors, except capitalized yields of Dominion bonds, all recorded increases. The indexes of the physical volume of business for the three latest completed years are given below, 1926 being taken as the base year.

Month.	1935.	1936.	1937.	Month.	1935.	1936.	1937.
January.....	97.5	106.2	116.9	July.....	103.0	110.8	126.5
February.....	100.6	104.8	115.0	August.....	107.9	113.5	123.4
March.....	94.2	104.0	118.7	September.....	101.9	120.0	123.8
April.....	98.7	111.0	124.0	October.....	107.2	121.5	127.4
May.....	103.3	107.6	122.0	November.....	110.0	118.0	127.9
June.....	99.2	111.1	126.0	December.....	106.2	118.4	121.4

Agriculture.—The volume of principal field crops in 1937 was nearly 7 p.c. under that of the preceding year, drought being responsible for low yields in the southern parts of Saskatchewan and Alberta. On the basis of value, the only provinces to record gains in farm revenues were Manitoba, Alberta, and British Columbia. Most of the major field crops registered declines in the volume of production, barley, rye, and mixed grains being exceptions. The acreage sown to potatoes increased by 5.8 p.c., and the total yield by 7.4 p.c., the value being slightly above the five-year average but nearly 40 p.c. under that of 1936, when prices were exceptionally high.

Slaughtering of cattle decreased slightly, but exports of live cattle increased by 13 p.c. Exports of live hogs also increased and pork exports registered an increase of over 25 p.c. The production and export of butter suffered slight declines but cheese exports increased by 8.6 p.c.

The rise in wholesale prices of farm products during 1937 was greater than in any other important commodity group. As a result such prices compared favourably with those of other groups for the first time in eight years.

* Abbreviated from "Business Conditions in Canada, 1937", prepared by Sydney B. Smith, M.A., Dominion Bureau of Statistics.

Minerals.—Canada's mineral production valued at \$456,800,000 in 1937, showed a gain of 26·2 p.c. over 1936, the previous peak year. The increase was due to both greater production and higher prices, copper, lead, and zinc being notable in the latter connection.

Gold production increased by 9·3 p.c., while the value of all metallic minerals was 28·8 p.c. greater than in the preceding year, that of fuels was 9·7 p.c. higher, the increase in the quantity of crude petroleum being noteworthy. Other non-metallic minerals increased by 34·3 p.c., the gains in the quantities of asbestos and gypsum being 36·1 p.c. and 25·0 p.c., respectively. Clay products and other structural materials increased by 32·2 p.c. and 33·7 p.c., respectively.

Forestry.—Employment in the three major divisions of this group, *viz.*, logging, sawmilling, and pulp and paper, showed increases of 36·5 p.c., 11·1 p.c., and 12·7 p.c., respectively. The production of newsprint, at 3,600,000 tons, reached a new high point, the increase over 1936 having been 14·4 p.c. Exports of forest products showed a gain of 25 p.c. over the preceding year, planks and boards recorded an increase of 23·3 p.c., while newsprint was 15·4 p.c. greater.

Electric Power.—The output of central electric stations in 1937 amounted to 27,575,000,000 k.w.h., an increase of 8·6 p.c. over 1936. This was a new peak of production and the industry is now directing its attention to the need of extending existing plants or undertaking new developments to meet the increasing requirements of its customers.

Manufacturing.—The volume of manufacturing production was slightly greater than in 1929 and showed a gain of 8·5 p.c. over 1936. The output of industries engaged in the production of producer goods showed an increase of 13·1 p.c. The output of steel ingots was of 25·6 p.c. greater than in 1936, while the increase in pig iron production amounted to 32·4 p.c. The gain in the index of consumer goods amounted to 6·5 p.c.

Construction.—Construction contracts awarded exceeded the total for 1936 by nearly 38 p.c. Residential and industrial construction showed increases of 31 p.c. and 126 p.c., respectively, while business buildings also recorded an increase of 46 p.c.

External Trade.—A further gain in merchandise trade was recorded in 1937, exports having increased by 8·4 p.c. and imports by 27·4 p.c. Owing to the high level of exports, the balance of commodity or visible trade was largely in Canada's favour. Among the 'invisible' items in the complete picture of international transactions, mention should be made of the tourist trade, which is estimated to have left net wealth in the country to the extent of about \$170,000,000, an increase of 20·8 p.c. over 1936.

Transportation.—Carloadings recorded an increase of 5·7 p.c., although decreases were shown in grain, and coal and coke. Manufactured products were moved in greater volume, and also ore and forestry products. Gross operating revenues of the Canadian railways showed an increase of 6·0 p.c. over the preceding year.

Canal traffic recorded a general advance in 1937, the traffic passing through the St. Lawrence canals during the period of navigation showed an increase of 11 p.c. and reached a new high point of 9,195,439 tons. The traffic through the Canadian and United States locks at Sault Ste. Marie has been exceeded only in four other years, and showed a gain of 26 p.c. over 1936. A new high record was shown for the

Welland canal, the total of 11,747,950 tons being an increase of 12·6 p.c. over 1936. There was a gain of 8·8 p.c. in the tonnage of freight carried through all Canadian canals, as compared with the preceding year.

Employment and Unemployment.—The continued gain in employment, as reported by employers, indicated substantial business recovery, fewer persons being shown as employed in governmentally assisted projects. Index numbers of employment, as at the first of each month of 1937, will be found at pp. 768-774 of the present volume.

The number of fully-employable persons on the relief rolls declined about 40 p.c. from the level of the preceding year.

Prices.—Wholesale price levels turned downward in April, 1937, after an irregular rise dating from February, 1933. A short-lived midsummer recovery supported mainly by farm products was followed by a steady decline which extended well into 1938. Living costs continued to rise gradually, with foods, rent, and clothing becoming definitely more expensive than in 1936. Security prices experienced appreciable losses dating from the end of March. Common and preferred stocks suffered to a much greater extent than high-grade bonds. As in the case of commodity prices, the 1937 decline in stock markets was the first serious set-back since prices commenced to advance from the depression nadir (June, 1932, for common stocks).

Banking.—The advance in current loans of the chartered banks continued steadily throughout 1937, the average of the twelve monthly figures showing a gain of 4·7 p.c. Notice deposits averaged 3·6 p.c. greater than in 1936, while demand deposits increased by 11·8 p.c. Despite the greater amount of money on loan, the banks holdings of securities increased by 7·2 p.c.

Bank debits showed a decrease from the position of 1936, the average being down 2·1 p.c. On the other hand, notes in the hands of the public increased by 3·3 p.c. at the end of December, 1937, as compared with the same date of the preceding year.

Public Finance.—Figures for the elapsed nine months of the Dominion fiscal year showed that, at Dec. 31, 1937, ordinary revenues had increased by over \$61,000,000, or by 18·8 p.c. as compared with the corresponding period ended in December, 1936. Ordinary expenditures increased to a lesser extent, being nearly \$7,000,000, or 2·5 p.c. greater than in the similar period of 1936. Total expenditures amounted to \$362,000,000, an increase of 0·4 p.c. Relief expenditures were down some \$10,000,000, but Government-owned enterprises called for an increase in expenditure of \$5,000,000.

Subsection 2.—Other Principal Events of the Year.

Provincial General Elections.—General elections, not reported in the 1937 Year Book, took place in Ontario on Oct. 6, 1937, when the Liberal Government of Hon. M. F. Hepburn was returned to office, and in Saskatchewan on June 8, 1938, when the Liberal Government of Hon. W. J. Patterson was returned to office.

Dominion-Provincial Relations.—On Aug. 14, 1937, a Royal Commission was appointed "to investigate the economic and financial basis of Confederation and of the distribution of legislative powers in the light of the economic and social developments of the last seventy years". The Hon. Newton W. Rowell, Chief Justice of Ontario, was appointed chairman of the Commission, and public sittings were commenced at Winnipeg on Nov. 29, 1937. Subsequently, sittings were

held in all the provinces and briefs received from Provincial Governments and many other bodies. The report of the Committee has not yet been submitted to Parliament.

The Bank of Canada.—On June 8, 1938, the Minister of Finance gave notice of a resolution to introduce a bill to completely nationalize the Bank of Canada, by acquiring the 100,000 outstanding Class "A" shares (par value \$50 each) at the price of \$59.20 per share and accrued dividends. The Government has, since 1935, held a majority capital interest through its ownership of 102,000 Class "B" shares. Following the purchase of the Class "A" shares, the capital structure of the Bank is to be reduced to \$5,000,000, consisting of 100,000 shares of \$50 each, issued to the Minister of Finance.

Diplomatic Appointments.—Count Robert de Dampierre, who succeeded M. Raymond Brugère as Minister of France to Canada, presented his credentials to His Excellency the Governor General on Dec. 9, 1937.

Baron Shu Tomii, who succeeded Mr. Sotomatsu Kato as Minister of Japan to Canada, presented his credentials to His Excellency the Governor General on May 25, 1938.

Trade Agreements, etc.—Reference is made at p. 487 of the present volume to the extension of the British preference to various colonies, and of most-favoured-nation treatment to certain dominions, colonies, protectorates and mandated territories.

Particulars of the latest changes in agreements with the United Kingdom and other parts of the Commonwealth will be found at pp. 488-490, and with foreign countries at pp. 490-497.

St. Lawrence Waterways Treaty.—This Treaty, submitted by the United States Government to the Dominion Government on June 1, 1938, combined, in revised form, the St. Lawrence Treaty of 1932 and the Niagara Convention of 1929—both previously rejected by the United States Senate. It is designed to meet objections of Ontario to the development of power on the Canadian side of the international section before there is a market to absorb it; under the revised draught, Ontario would also be permitted to divert water from the Albany River basin to the Great Lakes, and an export market for surplus power would be opened up in the United States. The Treaty is now under consideration by the Dominion and Provincial Governments concerned.

Subsection 3.—Obituary.

1937.—(See also pp. 1094-1095 of the 1937 Year Book.) June 19, Honoré Mercier, K.C., Châteauguay, Que., Chairman of the Quebec Streams Commission and former Minister of Lands and Forests for Quebec. Hon. Humphrey Mellish, Halifax, N.S., former Justice of the Supreme Court of Nova Scotia. June 23, James A. Sangster, Cornwall, Ont., M.L.A. for Glengarry. Lieut-Col. T. S. Belcher, Vancouver, B.C., former Deputy Commissioner of the R.C.M.P. June 30, Thomas V. Smith, Winnipeg, Man., Sergeant-at-Arms of the Manitoba Legislature. July 1, Robert Telford, Ottawa, Ont., Chief Clerk of Statistics, Department of National Revenue. July 10, Roland G. Orr, Ottawa, Ont., Chief Architect of the Department of Indian Affairs. July 25, Sir Charles Saunders, Toronto, Ont., former Dominion Cerealists, and discoverer of Marquis wheat. Aug. 6, Hon. H. B. Rainville, Atlantic City, N.J., U.S.A., former Speaker of the Quebec Legislative Assembly. Aug. 12, George F. O'Halloran, Ottawa, Ont., former Deputy Minister of Agriculture and Commissioner of Patents. Aug. 22, Col. L. H. Beer, Ottawa, Ont., Chief

Salvage Officer, Government Contracts Supervision Committee. Aug. 23, Hon. James D. Chaplin, P.C., St. Catharines, Ont., former Minister of Trade and Commerce. Aug. 24, David M. Wright, Stratford, Ont., former M.P. for Perth North. Sept. 4, D. A. Cameron, Montreal, Que., M. P. for Cape Breton North. Sept. 6, John Shearer, Ottawa, Ont., former Superintendent of Public Buildings, Dept. of Public Works. Sept. 10, Col. A. O. Lambert, Montreal, Que., former Director of Pay Services, Dept. of National Defence. Sept. 22, William J. Lynch, I.S.O., Ottawa, Ont., former Chief of the Dominion Patent Office. Sept. 28, Hon. Rodolphe Lemieux, P.C., Montreal, Que., Senator for Rougemont and former Postmaster General and Speaker of the House of Commons. Sept. 30, Hon. W. J. Roche, P.C., C.M.G., M.D., LL.D., Ottawa, Ont., former Chairman of the Civil Service Commission and Minister of the Interior. Oct. 6, Hon. James Arthurs, Toronto, Ont., Senator. Oct. 12, Albert Champagne, Ottawa, Ont., former M.P. for Battleford. Oct. 13, Hon. Simon F. Tolmie, P.C., V.S., former Dominion Minister of Agriculture and Premier of B.C. Oct. 15, Capt. L. G. Dixon, Ottawa, Ont., Supervisor of Nautical Services, Dept. of Transport. Oct. 28, Hon. D. A. Macdonald, Winnipeg, Man., Chief Justice of the Manitoba Court of King's Bench. Nov. 1, Malcolm McGugan, Strathroy, Ont., former M.P. for Middlesex South. Nov. 2, Mr. Justice J. B. Archambault, Montreal, Que., Senior Judge of the Circuit Court of the District of Montreal. Nov. 16, Hon. Nemèse Garneau, Quebec, Que., M.L.C. for Shawinigan. Nov. 20, J. A. Verville, St. Flavien, Que., M.P. for Lotbinière. Nov. 21, Dr. M. R. Blake, Winnipeg, Man., former M.P. for Winnipeg North. Nov. 22, Judge Henry Carpenter, Hamilton, Ont., Junior County Judge for Wentworth. Dec. 7, Lawson O. Clifford, Oshawa, Ont., former M.P. for Ontario. Dec. 19, Dr. C. J. Hamilton, Cornwall, Ont., former M.P. for Stormont. Dec. 24, Hon. John Alexander McEvoy, Toronto, Ont., Judge of the High Court of Justice for Ontario. Dec. 27, Sir Douglas Hazen, P.C., Saint John, N.B., retired Chief Justice of New Brunswick and former Premier of New Brunswick and Dominion Cabinet Minister. 1938.—Jan. 4, Rt. Hon. Sir George H. Perley, P.C., G.C.M.G., Ottawa, Ont., M.P. for Argenteuil and former High Commissioner for Canada in the United Kingdom and Minister of Overseas Military Forces. Wm. M. Ryan, Saint John, N.B., M.P. for St. John-Albert. Jan. 5, Hon. Arthur C. Kingstone, Vancouver, B.C., Judge of the Ontario Supreme Court. Jan. 8, Hon. Aimé Bénard, Winnipeg, Man., Senator for St. Boniface. Jan. 11, Archibald J. Macdonald, North Lancaster, Ont., former M.P. for Glengarry. Jan. 13, Hon. Wm. L. Walsh, Victoria, B.C., former Lieutenant-Governor of Alberta. Jan. 18, Alex D. Chaplin, Chatham, Ont., former M.P. for Kent. Jan. 24, Mr. Justice A. E. McPhillips, Victoria, B.C., Judge of the Appeal Court of B.C. and former Attorney-General. Jan. 26, William S. Hall, Edmonton, Alta., M.P. for Edmonton East. Jan. 28, Judge Albert Edward Taylor, Sarnia, Ont., County Judge for Lambton. Jan. 29, Capt. G. E. Robertson, Ottawa, Ont., Supervisor of Pilotage, Dept. of Transport. Feb. 3, Milton D. McVicar, Petrolia, Ont., M.L.A. for Lambton East. Feb. 10, Mr. Justice Auguste Tessier, Quebec, Que., former Judge of the Superior Court and Quebec Cabinet Minister. Dr. Frank P. Patterson, Vancouver, B.C., Leader of the Official Opposition in the British Columbia Legislature. Hon. William F. Roberts, M.D., Saint John, N.B., Minister of Health and Labour in the New Brunswick Government. Feb. 20, William A. Boys, Augusta, Ga., U.S.A., former M.P. for Simcoe. Feb. 22, Col. George P. Murphy, C.M.G., E.D., Ottawa, Ont., former Quartermaster-General of the C.E.F. Feb. 27, Mr. Justice Adolphe Stein, Montreal, Que., Judge of the Superior Court of Quebec and former M.P. for Kamouraska. Mar. 5, Major-General Sir James H. MacBrien, K.C.B., C.M.G., D.S.O., Toronto, Ont., Com-

missioner of the R.C.M.P. and former Chief of the General Staff. Mar. 8, Peter Sinclair, Ottawa, Ont., M.P. for Queens, P.E.I. Mar. 14, Engineer Lieutenant-Commander Charles S. Stephen, Ottawa, Ont., Technical Adviser, Marine Section, R.C.M.P. Mar. 20, Hon. Martin Burrell, P.C., Ottawa, Ont., Parliamentary Librarian. Mar. 23, Hon. Walter Scott, Guelph, Ont., former M.P. for Assiniboia, and first premier of Saskatchewan. Mar. 25, Hon. A. E. Fripp, Ottawa, Ont., Senator for Ottawa. Apr. 7, Hon. Norman Searth Macdonnell, Toronto, Ont., Justice of Supreme Court of Ontario, Appellate Division. Apr. 14, Levi Thomson, K.C., Regina, Sask., former M.P. for Qu'Appelle. May 3, Major Frederick C. Betts, Mayo, Que., M.P. for London, Ont. May 6, Duke of Devonshire, K.G., G.C.M.G., G.C.V.O., Baslow, Derbyshire, England, Governor General of Canada, 1916-21. June 3, Alexander McKay Edwards, Galt, Ont., M.P. for Waterloo South. Hon. Hugh Ross, Halifax, N.S., Justice of the Supreme Court of Nova Scotia. June 5, Hon. Morrison M. MacBride, Brantford, Ont., Minister of Labour for Ontario. May 29, Thos. F. Sutherland, Toronto, Ont., Deputy Minister of Mines for Ontario. May 31, William Jackson, Port Stanley, Ont., former M.P. for West Elgin.

Section 4.—Extracts from the Canada Gazette—Official Appointments, Commissions, etc.*

Lieutenant-Governors, 1937.—Nov. 23, Albert Matthews, Esq., LL.D., Toronto, Ont.: to be Lieutenant-Governor of the Province of Ontario from Nov. 30, 1937.

Senators, 1938.—Jan. 20, Norman Platt Lambert, Ottawa, Ont.; Duncan McLean Marshall, Toronto, Ont.

New Members of the House of Commons, 1937.—Oct. 18, Matthew MacLean, elected for Cape Breton North-Victoria, N.S. Nov. 1, Angus Neil McCallum, elected for Frontenac-Addington, Ont. Nov. 8, Hon. William Earl Rowe, elected for Dufferin-Simcoe, Ont. Nov. 29, Robert Wellington Mayhew, elected for Victoria, B.C. Dec. 27, Joseph N. Francoeur, elected for Lotbinière, Que. **1938.**—Jan. 17, Joseph A. Bonnier, elected for St. Henry, Que. Feb. 21, Allan G. McAvity, elected for St. John-Albert, N.B. Feb. 28, Georges Héon, elected for Argenteuil, Que. Mar. 21, Orvis A. Kennedy, elected for Edmonton East, Alta. Apr. 25, James Lester Douglas, elected for Queens, P.E.I.

Honorary Aides-de-Camp, 1937.—His Excellency the Governor General has been pleased to make the following appointments, *viz.*: Nov. 13, Lieut.-Col. A. E. Nash, M.C., the Governor General's Horse Guards. **1938.**—Apr. 1, Lieut.-Col. P. Flynn, Royal 22e Regiment, *vice* Lieut.-Col. G. E. A. Dupuis, M.C. Apr. 5, Lieut.-Col. W. G. H. Wurtele, M.C., V.D., the Governor General's Foot Guards, *vice* Lieut.-Col. G. G. Chrysler, M.C., V.D.

Official Appointments, 1937.—June 24, Hon. John Alexander Mathieson, Chief Justice of Prince Edward Island, appointed Administrator of the Government of the Province of Prince Edward Island from Apr. 10 to June 10, 1937, to continue as Administrator up to and including June 17, 1937. Sir Frederick Banting, Banting Institute, Department of Medical Research, University of Toronto; Professor E. F. Burton, Head of the Department of Physics, University of Toronto; W. R. Campbell, General Manager, Ford Motor Company of Canada, Ltd.; Professor R. H. Clark, Head of the Department of Chemistry, University of British Columbia; Professor E. P. Fetherstonhaugh, Dean of the Faculty of Engineering and Architecture, University of Manitoba: to be Members of the National Research Council for a

* This list is in continuance of that at pp. 1095-1105 of the 1937 Year Book.

term of three years expiring Mar. 31, 1940, and R. J. Tallon, Secretary-Treasurer, Trades and Labour Congress of Canada, to be a Member of the said Council for a term of two years expiring Mar. 31, 1939. July 21, Constable David Charles Slinn: to be Mining Recorder, Agent of Dominion Lands, and Crown Timber Agent for the Great Bear Lake Mining District with headquarters at Cameron Bay, N.W.T., as from June 26, 1937. July 23, Hon. C. R. Mitchell, Chief Justice of the Trial Division of the Supreme Court of Alberta: to be Administrator of the Government of the Province of Alberta during the absence of the Lieutenant-Governor of the said Province from July 24, 1937, to Aug. 1, 1937. Aug. 11, Hon. James Emile Pierre Prendergast, Chief Justice of Manitoba: to be Administrator of the Government of the Province of Manitoba during the absence of the Lieutenant-Governor of the said Province from Aug. 14 to Sept. 13, 1937, both dates inclusive. Aug. 25, Lewis Warner Patmore, Esq., K.C., Prince Rupert, B.C.: to be one of the Canadian Members of the International Fisheries Commission under the Pacific Halibut Treaty in lieu of George J. Alexander, Esq., resigned. Sept. 22, Robert John Moffat, Esq., Bradwell, Sask.: to be a Director of the Canadian National Railways for a term of three years from Oct. 1, 1937. Oct. 20, Donald MacGillivray, Esq., Port Colborne, Ont.: to be a Member of the Buffalo and Fort Erie Public Bridge Authority, *vice* Hon. J. D. Chaplin, St. Catharines, Ont. Oct. 27, Nathan Louis Nathanson, Toronto, Ont., President, Famous Players Canadian Corporation Ltd.; Alan Butterworth Plaunt, Ottawa, Ont., Journalist; and Brigadier-General Victor Wentworth Odium, Vancouver, B.C., Broker: to be re-appointed as Governors of the Canadian Broadcasting Corporation for a term of three years from Nov. 2, 1937. Oct. 29, Hon. C. A. Dunning, Minister of Finance; Dr. W. C. Clark, Deputy Minister of Finance; Hon. F. R. Davis, Minister of Health, N.S.; E. H. Blois, Director of Old Age Pensions, N.S.; Hon. A. P. Paterson, President, Executive Council, N.B.; W. P. Jones, Director of Old Age Pensions, N.B.; Hon. Mark R. McGuigan, Minister of Education and Public Health, P.E.I.; Otto Campbell, Superintendent of Old Age Pensions, P.E.I.; Hon. W. Tremblay, Minister of Labour, Que.; J. R. Forest, President, Quebec Old Age Pensions Commission, Que.; Hon. Eric Cross, Minister of Public Welfare, Ont.; George Tattle, Vice-Chairman, Old Age Pensions Commission, Ont.; Hon. W. J. Major, Attorney-General, Man.; Major C. K. Newcombe, Chairman, Workmen's Compensation Board, Man.; Hon. Charles M. Dunn, Minister of Highways and Transportation, and in charge of the Old Age Pensions Act, Sask.; W. C. Mills, Commissioner, Old Age Pensions, Sask.; Hon. Solon Low, Provincial Treasurer, Alta.; Dr. V. W. Wright, Chairman, Workmen's Compensation Board, Alta.; Hon. George S. Pearson, Minister of Labour, B.C.; E. S. H. Winn, Chairman, Workmen's Compensation Board, B.C.: to be Members of the Inter-provincial Board pursuant to the Old Age Pensions Act in the place and stead of the members of the Interprovincial Board previously established. Nov. 15, Joseph Sirois, Esq., LL.D., Quebec, Que., Notary Public, Professor of Constitutional and Administrative Law at Laval University: to be a Member of the Commission on Dominion-Provincial Relations in the place of Hon. Mr. Justice Rinfret, resigned. Nov. 26, Gustave Lanctôt, Esq., K.C., D. Litt., LL.D., Ottawa, Ont.: to be Dominion Archivist. Dec. 9, David Livingstone McKeand, Esq., Secretary, Northwest Territories Council: to be a Member of the Geographic Board of Canada.

1938.—Jan. 29, Hon. Horace Harvey, Chief Justice of Alberta: to be Administrator of the Government of the said Province during the absence of the Lieutenant-Governor, from Jan. 29 to Feb. 8, 1938. Feb. 10, George Spence: to be Director of Rehabilitation, effective Mar. 1, 1938; Oswald Freer: to be Superintendent of Land Utilization, effective Jan. 1, 1938; John Vallance: to be Superintendent of Water

Development, *vice* Senior Rehabilitation Officer, effective Feb. 1, 1938; the above to be temporary appointments under the Prairie Farm Rehabilitation Act with headquarters at Regina, Sask. Feb. 26, Gordon Murchison, Esq.: to be Director of Soldier Settlement, from and after Mar. 1, 1938. Mar. 4, Charles H. Read, Esq., Amherst, N.S.: to be a Director of the Canadian National Railway Company in succession to Donald Hugh McDougall for a term to expire on Sept. 30, 1940. Mar. 11, Acting Deputy Commissioner Stuart Taylor Wood: to be Commissioner of the R.C.M.P. from Mar. 6, 1938, *vice* Major-General Sir James H. MacBrien, deceased. Mar. 18, D. D. Ryan, Esq., B.C.L., Junior Departmental Solicitor, Department of the Secretary of State: to be Registrar to exercise the powers conferred, and perform the duties imposed by "The Unfair Competition Act, 1932", effective Apr. 1, 1938. Mar. 23, Col. Stuart Taylor Wood, Commissioner of the R.C.M.P.: to be a Member of the Northwest Territories Council, *vice* Major-General Sir James H. MacBrien, K.C.B., C.M.G., D.S.O., deceased. Mar. 29, Aimé Boucher, Esq., Notary, Pierreville, Yamaska, Que.: to be a member of the Canadian Farm Loan Board for a term of five years from Mar. 25, 1938, *vice* Charles Duquette, deceased. Mar. 30, John MacIntosh, Esq.: to be one of the Harbour Commissioners of the Harbour of Belleville, *vice* Harry C. Earle, Esq., deceased. Mar. 31, Oscar Douglas Skelton, M.A., Ph.D., LL.D., Under-Secretary of State for External Affairs: to be a Member of the Northwest Territories Council. Col. Stuart Taylor Wood, Commissioner of the R.C.M.P.: to be an *ex officio* member of the Advisory Board on Wild Life Protection, *vice* Sir James MacBrien, deceased. May 2, Alexander Johnston, Esq., C.M.G.; Duncan K. MacTavish, Esq., K.C.; and J. A. Ewart, Esq., Ottawa, Ont.: to be members of the Federal District Commission. Col. William Charles Henry Wood, Quebec, Que.; George MacKinnon Wrong, Esq., LL.D., Toronto, Ont.; James Francis Kenney, Esq., M.A., Ph.D., Ottawa, Ont.; Lieut.-Col. Oscar Gilbert, Quebec, Que.; to be Members of the National Battlefields Commission. May 13, Dr. H. E. Bigelow, Professor of Chemistry, Mount Allison University, Sackville, N.B.; Dr. J. B. Collip, Professor of Biochemistry, McGill University, Montreal, Que.; Dean C. J. MacKenzie, Department of Civil Engineering, University of Saskatchewan, Saskatoon, Sask.; M. l'abbé A. Vachon, Dean, Faculty of Science, Laval University, Quebec, Que.: to be Members of the National Research Council for a term of three years, as provided by the Research Council Act, and expiring Mar. 31, 1941. May 24, Hon. William Melville Martin, Acting Chief Justice of Saskatchewan: to be Administrator of the Government of the Province of Saskatchewan, during the absence of the Lieutenant-Governor, from May 24, to June 30, 1938.

Judicial Appointments, 1937.—Aug. 25, Wilfrid D. Roach, Esq., K.C., Windsor, Ont.: to be a Judge of the High Court of Justice for Ontario. Maynard B. Archibald, K.C., Esq., Halifax, N.S.: to be a Puisne Judge of the Supreme Court of Nova Scotia. Nov. 23, Ewan A. McPherson, Esq., K.C., Portage la Prairie, Man.: to be Chief Justice of His Majesty's Court of King's Bench for Manitoba. Nov. 26, Dr. James Moore Morrow, Fort Smith, N.W.T.: to be Stipendiary Magistrate for the Northwest Territories, pursuant to the Northwest Territories Act. Nov. 30, Alphonse Decary, Esq., K.C., Montreal, Que.; Alfred Savard, Esq., K.C., Quebec, Que.; Garon Prattie, Esq., K.C., Quebec, Que.: to be Puisne Judges of the Superior Court in and for the Province of Quebec. Paul Mercier, Esq., K.C., Montreal, Que., Member of Parliament for the Electoral District of St. Henry (Montreal) to be Senior Judge (doyen) of the Circuit Court of the District of Montreal, Que. Dec. 10, D. Edgar Shaw, Esq., K.C., Charlottetown, P.E.I.: to be

Judge of the County Court for the county of Prince in the said province. 1938.—Jan. 19, Kenneth M. Martin, Esq., K.C.: to be Judge of the Juvenile Court of the City of Charlottetown, P.E.I. His Honour D. Edgar Shaw, Judge of the County Court of Prince County, P.E.I.: to be Judge of the Juvenile Court of the Town of Summerside, P.E.I. Jan. 25, George A. Urquhart, Esq., K.C., Toronto, Ont.: to be a Judge of the High Court of Justice for Ontario. J. M. Godfrey, Esq., K.C., Toronto, Ont.: to be a Judge of the High Court of Justice for Ontario. E. F. Lazier, Esq., K.C., Hamilton, Ont.: to be Judge of the County Court for the County of Wentworth in the Province of Ontario and a local Judge of the High Court of Justice for Ontario. William F. Schwenger, Esq., K.C., Hamilton, Ont.: to be Junior Judge of the County Court for the County of Wentworth in the Province of Ontario and a Local Judge of the High Court of Justice for Ontario. Jan. 26, Marshall A. Paquet, a Justice of the Peace for King's County, P.E.I.: to be Judge of the Juvenile Court for the Town of Souris in the said Province. Jan. 29, Cornelius H. O'Halloran, Esq., K.C., Victoria, B.C.: to be a Puisne Judge of the Court of Appeal for the Province of British Columbia. Feb. 15, David Whiteside, Esq., K.C., New Westminster, B.C.: to be Judge of the County Court for the County of Westminster in the said province and also a Local Judge of the Supreme Court of British Columbia. May 2, John Gordon Gillanders, Esq., K.C., London, Ont.: to be a Justice of the Court of Appeal for Ontario and *ex officio* a Judge of the High Court of Justice for Ontario. M. A. Miller, Esq., K.C., Guelph, Ont.: to be Judge of the County Court for the County of Lambton, Ont., and also a Local Judge of the High Court of Justice for Ontario during his tenure of the said office. Egerton Lovering, Esq., K.C., Toronto, Ont.: to be Seventh Junior Judge of the County Court of the County of York, Ont.; and also a Local Judge of the High Court of Justice for Ontario so long as he shall hold the said office of Judge. June 1, Earle C. Popham, Esq., K.C., Kenora, Ont., to be Judge of the District Court of the Provisional Judicial District of Kenora, Ont., and also a Local Judge of the High Court of Justice for Ontario during his tenure of the said office, with effect on and after June 1, 1938. Alexander J. McComber, Esq., K.C., Port Arthur, Ont.: to be Judge of the District Court of the Provisional Judicial District of Thunder Bay, Ont., and also a Local Judge of the High Court of Justice for Ontario during his tenure of the said office, with effect on and after June 1, 1938. Arthur H. Dowler, Esq., K.C., Fort William, Ont.: to be Junior Judge of the District Court of the Provisional Judicial District of Thunder Bay, Ont., and also a Local Judge of the High Court of Justice for Ontario during his tenure of the said office, to take effect on and after June 1, 1938.

Commissioners, 1937.—July 15, Robert Bouchard, Esq., Barrister, Sherbrooke, Que.: to be a Commissioner under Part I of the Inquiries Act, to investigate charges of political partisanship against Government employees in the Province of Quebec. July 29, John Allan Langdon McIntyre, Esq., Barrister, of the firm of Butler, McIntyre and Butler, Murray Street, Hobart, Tasmania: to be a Commissioner to administer oaths and to take and receive affidavits, declarations and affirmations in Tasmania for use in the Supreme and Exchequer Courts of Canada. Aug. 12, James A. Langley, Esq., Canadian Trade Commissioner at Rotterdam, Netherlands: to be a Commissioner to administer oaths and to take and receive affidavits, declarations, and affirmations in the Netherlands for use in the Supreme and Exchequer Courts of Canada. Aug. 14, Hon. Newton W. Rowell, LL.D., Chief Justice of Ontario; Hón. Thibaudeau Rinfret, Justice of the Supreme Court of Canada; John W. Dafoe, Esq., LL.D., Winnipeg, Man.; Robert Alexander MacKay, Esq., Ph.D., Professor of Government, Dalhousie University, Halifax,

N.S.; and Henry Forbes Angus, Esq., M.A., B.C.L., Professor of Economics, University of British Columbia, Vancouver, B.C.: to be Commissioners, under Part I of the Inquiries Act, to investigate the economic and financial basis of Confederation and of the distribution of legislative powers in the light of the economic and social developments of the past seventy years. Hon. Newton W. Rowell, LL.D., Chief Justice of Ontario, to be Chairman of the said Commission. Aug. 25, Andrew Meikle, Esq., Field Supervisor, Soldier Settlement, Saskatoon, Sask.; Harry Charles Washington, Esq., Field Supervisor, Soldier Settlement, Saskatoon, Sask.: to be Commissioners to take affidavits, oaths, statutory declarations, or solemn affirmations required to be taken or made for the purposes of the Soldier Settlement Act. Sept. 8, His Honour Albert Constantineau, Judge of the County Court for the Counties of Prescott and Russell, Ont.: to be a Commissioner pursuant to the Inquiries Act, to inquire into the dispute between the management of the Quebec Central Railway and the employees. Sept. 22, The Hon. Louis Arthur Audette, former Judge of the Exchequer Court of Canada; Ephraim Herbert Coleman, Esq., K.C., LL.D., Under-Secretary of State; and Oscar Coderre, Esq., LL.B., Chief of the Naturalization Branch, Dept. of the Secretary of State, all of the City of Ottawa, Ont.: to be a Commission under the provisions of the Naturalization and Inquiries Acts to inquire into and report upon all cases referred to the Commission in which may be considered the revocation of naturalization certificates. The Hon. Mr. Audette to be Chairman and Presiding Officer of the Commission. Jacques Casgrain, Esq., Barrister, of the City of Quebec, Que.: to be a Commissioner pursuant to Part I of the Inquiries Act to investigate charges of political partisanship against Government employees in the Province of Quebec. Oct. 6, Lester S. Glass, Esq., Canadian Trade Commissioner at Rio de Janeiro, Brazil: to be a Commissioner to administer oaths and to take and receive affidavits, declarations and affirmations in Brazil for use in the Supreme and Exchequer Courts of Canada. Oct. 20, J. H. English, Esq., Canadian Trade Commissioner at London, Eng.: to be a Commissioner to administer oaths and to take and receive affidavits, declarations and affirmations in the United Kingdom for use in the Supreme and Exchequer Courts of Canada. Oct. 27, C. M. Croft, Esq., Canadian Commercial Secretary, Tokyo, Japan: to be a Commissioner to administer oaths and to take and receive affidavits, declarations and affirmations in Japan for use in the Supreme and Exchequer Courts of Canada. Dec. 1, A. H. H. Des Barres, Esq., Stipendiary Magistrate, Guysborough, N.S.: to be a Commissioner to investigate whether Mr. Otto A. Munroe of Yankee Harbour, Guysborough County, N.S., is entitled to fishing bounty in connection with his fishing operations in the year 1936 and whether the statements made in his claim for the year are correct. Feb. 28, Ludger Langlois, Advocate, Quebec, Que.: to be a Commissioner pursuant to Part I of the Inquiries Act, to investigate such charges of political partisanship against Government employees in the Province of Quebec as may be referred to him. May 11, Hon. Archer Martin, Chief Justice of British Columbia: to be a Commissioner, under Sec. 128 of the British North America Act, to administer the oath of allegiance to Robert Wellington Mayhew, Esq., Member of the House of Commons for the electoral district of Victoria, B.C.

Day of General Thanksgiving.—Monday, Oct. 11, 1937, was appointed by proclamation as a "day of general thanksgiving to Almighty God for the bountiful harvests and other blessings with which Canada has been favoured".

APPENDIX.

External Trade of Canada in the fiscal year 1937-38.

Preliminary figures of the external trade of Canada for the fiscal year ended Mar. 31, 1938, show a grand total trade of \$1,883,891,122, as compared with a figure of \$1,746,015,786 in preceding year, or an increase of \$137,875,336. The increase in the imports was \$127,194,352. Domestic exports increased by \$9,046,703 and foreign exports by \$1,530,281. Figures by industrial groups are given in the following table, where the figures of imports and exports may be compared with the totals given for previous years in the tables on pp. 528 and 536-537 of this volume.

Imports and Exports of Canada, fiscal year ended Mar. 31, 1938.

Industrial Group.	Imports.
	\$
Agricultural and vegetable products.....	146,335,406
Animals and animal products.....	30,399,795
Fibres, textiles, and textile products.....	108,932,093
Wood, wood products, and paper.....	34,221,181
Iron and its products.....	209,236,711
Non-ferrous metals and their products.....	47,063,972
Non-metallic minerals and their products.....	136,662,502
Chemicals and allied products.....	36,890,149
Miscellaneous commodities.....	49,328,109
Total Imports.....	799,069,918
Total, Dutiable Imports.....	434,165,772
Total, Free Imports.....	364,904,146
Duty Collected.....	103,574,422
Industrial Group.	Exports.
	\$
Agricultural and vegetable products.....	235,324,412
Animals and animal products.....	136,112,957
Fibres, textiles, and textile products.....	14,225,183
Wood, wood products, and paper.....	253,434,860
Iron and its products.....	69,744,157
Non-ferrous metals and their products.....	292,452,554
Non-metallic minerals and their products.....	29,342,764
Chemicals and allied products.....	20,926,267
Miscellaneous commodities.....	18,665,455
Total, Domestic Exports.....	1,070,228,609
Total, Foreign Exports.....	14,592,595
Total Exports.....	1,084,821,204
Grand Total, External Trade.....	1,883,891,122

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